```
Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                       Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Run
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OM nucleic
                                                                                                                                                                                                                                                                                           ŏ
         on:
                                                                                                                                                                                                                                                                                                                                                     score greater
                                                                                                                                                                                                                                                                                           Score
       ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         seq length:
seq length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                i
                                                                                                                                                                                                                                                                                                                                      No. is the number of results predicted by chance to have a greater than or equal to the score of the result being printed, s derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                   Issued_Patents_NA:*

1: /cgn2_6/ptodata/1,

2: /cgn2_6/ptodata/1,

3: /cgn2_6/ptodata/1,

4: /cgn2_6/ptodata/1,

5: /cgn2_6/ptodata/1,

6: /cgn2_5/ptodata/1,
                                                                                                                                                                                                                                                                                          Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-954-556-3
4268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          441362 segs, 153338381 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         December 11,
       GenCore version 5.1.3
Copyright (c) 1993 - 2002 Compugen Ltd
        /cgn2_6/ptodata/1/ina/5A_COMB.seq:*
/cgn2_6/ptodata/1/ina/5B_COMB.seq:*
/cgn2_6/ptodata/1/ina/6A_COMB.seq:*
/cgn2_6/ptodata/1/ina/6B_COMB.seq:*
/cgn2_6/ptodata/1/ina/BCTUS_COMB.seq:*
/cgn2_6/ptodata/1/ina/backfiles1.seq:*
                                                                                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          50
       ВB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2002, 14:33:27
            US-08-451-822A-9
US-08-323-430-9
US-08-471-570-15
US-07-947-683-15
US-07-947-683-15
US-07-997-133-4
US-07-997-133-4
US-08-859-998-431
US-08-859-998-431
US-08-451-822A-10
US-08-323-430-10
US-08-323-430-11
US-08-323-430-11
US-08-323-430-11
US-08-323-430-11
US-08-323-430-11
US-08-371-001-4
US-08-371-01-5
US-08-522-623-5
US-08-371-01-5
US-08-522-623-61
                                                                                                                                                                                                                                                                                                                        SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; Search time 100 Seconds (without alignments) 13088.964 Million cell updates/sec
Sequence 9, Appli
Sequence 15, Appli
Sequence 15, Appli
Sequence 15, Appli
Sequence 4, Appli
Sequence 4, Appli
Sequence 431, App
Sequence 432, App
Sequence 432, App
Sequence 10, Appli
Sequence 10, Appli
Sequence 11, Appli
Sequence 11, Appli
Sequence 11, Appli
Sequence 11, Appli
Sequence 1, Appli
Sequence 1, Appli
Sequence 5, Appli
Sequence 6, Appli
                                                                                                                                                                                                                                                                                       Description
```

c	ဂ	ი	ი	O	ი		c	o	O	O	O	o			c	o	o
4 <u>4</u>	44	43	42	41	40	39	38	37	36	35	ω 4.	w	32	31	30	29	28
21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.4	21.8	21.8	21.8	21.8	21.8	22
0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
50	49	48	47	46	4 5	45	44	43	42	38	25	44	44	43	40	37	45
w	ω	w	ω	ω	w	N	w	w	w	4	N	4	_	N	4	4	S
US-08-757-024-8	US-08-757-024-9	US-08-757-024-10	US-08-757-024-11	US-08-757-024-12		US-08-471-025-44	US-08-757-024-14	US-08-757-024-15	US-08-757-024-16	US-09-454-704A-7	US-08-678-039A-4	US-09-142-334-13	US-08-664-596B-9	US-08-686-599A-14	US-09-306-290-34	US-09-526-542-19	PCT-US93-03256-11
80	Sequence 9, Appli	10.	1	Sequence 12, Appl	<u>.</u>	4	14.	15	16.	7		<u>.</u>	۰.	14		19	Sequence 11, Appl

ALIGNMENTS

PRIOR APP APPLICA FILLING PRIOR APP APPLICA FILLING ATTORNEY NAME: REGISTR REFERENU TELECOMMU TELECOMMU TELECOMMU TELECOMMU TELECTAX INFORMATION SEQUENCE (LENGTH: TYPE: TYPE: TYPE: TYPE: TYPE: TYPE: TYPE: TYPE: TYPE: TYPE:	COUNTR ZIP: COMPUTER MEDIUM COMPUTII COMPUTI COMPUTI COMPUTI COMPUTI CORRENT C	US-08-41-822, Sequence 9, Patent No. GENERAL IN. APPLICAN APPLICAN APPLICAN APPLICAN APPLICAN APPLICAN APPLICAN APPLICAN CORRESPON CORRESPON ADDRES, STATE:
LICATIC DATE LICATIC LICATE LI	Y: USA READABI READABI TYPE: ER: IBN RING SYST RE: PAT RE: PAT RION NU DATE: DATE: DATE: DATE: DATE: DATE:	822A-9/c 9, Appli 10. 586388 INFORMAN INFORMAN INFORMAN CANT: DI CANT: Ja CANT: SO CANT: SO C
ON DATA: UMBER: US 07/934,372 21-AUG-1992 ON DATA: UMBER: US 07/549,587 O6-JUL-1990 INFORMATION: ky, Martin NUMBER: 29,699 KET NUMBER: A0496E ON INFORMATION: 610) 454-3816 O) 454-3816 O) 454-3816 C acid Single near	SA ABLE FORM: Floppy disk Floppy disk IBM PC compatible VSTEM: PC-DOS/MS-DOS PATENTIN Release #1.0, V CATION DATA: ION: 435 ION: 435 ION: 435 ION: 435 ION: 435 ION: 436 ION: 436 ION: 437 ION: 436	US/0845182: Traig A Greg Chael C Oger, Josepl Fibroblast 19 SS: Poulenc Rord
372 587	ersion #1.	rowth Factor Legal Depart
	25 1.)	Receptors

0 0 0 0 0 0 0 0

ററ

O

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
              WESULT 3
US-08-471-570-15/c
Sequence 15, Application US/08471570
Patent No. 5750371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 2
US-08-323-430-9/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-451-822A-9
                                                                                                                     밁
                                                                                                                                                  õ
                                                                                                                                                                                                                                                           ; MOLECULE TYPE: cDNA US-08-323-430-9
                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 33; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
APPLICANT: Dionne, Craig A
APPLICANT: Crumley, Greg
APPLICANT: Jaye, Michael C
APPLICANT: Schlessinger, Joseph
TITLE OF INVENTION: Fibroblast Growth Factor Receptors
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 9, Applica
Patent No. 6344546
                                                                                                                                                                                                                                                                                                                                  INFORMATION FOR SEO ID NO: 9: SEQUENCE CHARACTERISTICS:
LENGTH: 33 base ~ Type:
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2707 TATCCACACATANACGGCAGTGTTAAAACATGA 2739
                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: GOODMAN, ROSANNA
REGISTRATION NUMBER: 32,534
REFERENCE/DOCKET NUMBER: A00
TELECOMMUNICATION INFORMATION:
TELEPHONE: (215) 454-3817
                                                                                                                                    2707 TATCCACACATAAACGGCAGTGTTAAAACATGA 2739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: US to be assist APPLICATION NUMBER: US to be assist FILING DATE: 21-AUG-1992
APPLICATION NUMBER: US 07/549,587
FILING DATE: 06-JUL-1990
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: Patentin Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
ADDRESSEE: Rhone-Poulenc Rorer Legal Department
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Palana
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STREET: 500 Arcola CITY: Collegeville STATE: PA
                                                                                                                                                                                                                                                                                            TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     33 TATCCACACATAAACGGCAGTGTTAAAACATGA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local
                                                                                                                     33 TATCCACACATAAACGGCAGTGTTAAAACATGA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Application US/08323430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         500 Arcola Road
                                                                                                                                                                                      0.8%; Score 33; DB ilarity 100.0%; Pred. No. 26 Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.8%; Score 33; DB 2;
100.0%; Pred. No. 26;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US to be assigned
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US/08/323,430
                                                                                                                                                                                                                                                                                                                                                                                                                                                         A0496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                          DB 4;
. 26;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 33;
                                                                                                                                                                                                                           Length 33;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                            indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                            0
```

```
Query Match
Best Local Similarity
Tatches 33; Conserve
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; MOLECULE TYPE: other nucleic acid, synthetic DNA US-08-471-570-15
                                                                                                                                                                                                                                                                                      US-07-947-683-15/c
Sequence 15, Application US/07947683
Patent NO. 5589451
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                    RESULT 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELECOMMUNICATION INFORMATION:
TELEPHONE: (617)523-3400
TELEFAX: (617)523-6440
TELEX: 200291 STRE UR
INFORMATION FOR SEQ ID NO: 15:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
APPLICATION NUMBER: US 07/743369
APPLICATION NUMBER: US 07/743369
FILING DATE: 16-AUG-1991
ATTORNEY/AGENT INFORMATION:
NAME: LINEK, Ernest V
REGISTRATION NUMBER: 29822
REFERENCE/DOCKET NUMBER: 40897
                                                                                                                                                                                                           APPLICANT: WILSON, :
TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: WATANABE, Tatsuya
TITLE OF INVENTION: PROTEIN, DNA AND USE THEREOF
NUMBER OF SEQUENCES: 18
CORRESPONDENCE ADDRESS:
ADDRESSEE: DAVID G. CONLIN; DIKE, BRONSTEIN, ROBERTS
ADDRESSEE: CUSHMAN
                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: FC-DOS/MS-DOS
COMPUTER: FC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                COMPUTER READABLE FORM:
MEDIUM TYPE: FLOPPY DISK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                   NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
ADDRESSEE: ARNOLD, W
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 39 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US/01 FILING DATE: 06-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: Boston
STATE: Massa
                                                                                          CITY: HOUSTON
STATE: TEXAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STREET:
                                                        COUNTRY: U
ZIP: 77210
                                                                                                                                 STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US/08/149,664
COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               130 Water Street
                                                                                                                                 P.O. BOX 4433
                                                                          USA
                                                                                                                                                                                                                                                                      WILSON, STEVEN E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SENOO, Masaharu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IGARASHI, Koichi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
IBM PC COMPATIBLE
                                                                                                                                                   ARNOLD, WHITE & DURKEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.8%;
                                                                                                                                                                                                           METHODS AND TREATMENTS FOR CORNEAL HEALING WITH HEPATOCYTE AND KERATINOCYTE GROWTH FACTORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US/08/471,570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 33; DB 1; Length 39; Pred. No. 28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
```

В Š

```
US-08-400-323-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 5
US-08-400-323-18/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-07-947-683-15
     Query Match
                                                                                                                                                                                       SOPTMARE: PATENTIN PLEASE #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/400,323
FILING DATE: 09-MAR-1995
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: Kitchell, Barbara S.
REGISTRATION NUMBER: 33,928
REFERENCE/DOCKET NUMBER: 075D:431\KIT
TELECOMMUNICATION INFORMATION:
TELEPHONE: (512) 418-3000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 0.7%; Score 30; DB Best Local Similarity 100.0%; Pred. No. 1. Matches 30; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 18, Application US/08400323 Patent No. 5703047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 30 base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Patent No.
                                                                                                                                              INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                         SEQUENCE CHARACTERISTICS:
LENGTH: 30 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1242 GATTGAGGTTCTCTATATTCGGAATGTAAC 1271
                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
COMPUTER: COMPUTER: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELECOMMUNICATION INFORMATION:
TELEPHONE: 512-320-7200
TELEFAX: 512-474-7577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OPERATING SYSTEM: PC-DOSOFTWARE: WORDPERFECT CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET: P. O. CITY: Houston STATE: TX
                                                                                                                                                               TELEFAX: (512) 474-7577
TELEX: 79-0924
                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY: USA
ZIP: 77210-4433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30 GATTGAGGTTCTCTATATTCGGAATGTAAC 1
                                                                        STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 30 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: KITCHELL, BARBARA S.
REGISTRATION NUMBER: 33,92
REFERENCE/DOCKET NUMBER: (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
FILING DATE: SEPTEN
                                                                                   : 30 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   E: Arnold, White & Durkee P. O. Box 4433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Wilson, Steven E.

VENTION: Methods and Treatments for Corneal
VENTION: Healing with Growth Factors
SEQUENCES: 18
                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WORDPERFECT 5.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEPTEMBER 21, 1992
                                                                    single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PC-DOS/MS-DOS
 0.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          33,928
33,928
TTSD:311/KIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US/07/947,683
 Score 30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 1; L
. 1.3e+02;
 DΒ
 <u>ب</u>
Length 30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
```

```
RESULT 7
US-07-997-133-4/c
                                                                                                                                               밁
                                                                                                                                                                                                                                                                         US-07-997-133-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 6
US-07-997-133-4/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
               Sequence 4, Application US/07997133
GENERAL INFORMATION:
APPLICANT: Bergonzoni, Laura
APPLICANT: Mazue, Guy
                                                                                                                                                                                                                                                                                                                                                               TELECOMMUNICATION INFORMATION:
TELEPHONE: (703)521-4500
TELEFAX: (703)66-2347
TELEFAX: 24885 OPAT UR
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 27; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STATE.

SIP: 22202

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

"OMBITER: IBM PC COMPATIBLE
""CTEM: PC-DOS/MS-DOS
""CTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 4 Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity 100.0%; Matches 30; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/07/642,755
FILING DATE: 18-JAN-1991
ATTORNEY/AGENT INFORMATION:
NAME: Oblon, NO. 5288855man F.
REGISTRATION NUMBER: 24,618
REFERENCE/DOCKET NUMBER: 769-226-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STREET: 1/J
STREET: 1/J
CITY: Arlington
STATE: Virginia
ZIP: 22202
                                                                                                                                                           2488 TGTTGGCATGCAGTGCCCTCCCAGAGACC 2516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                     MOLECULE TYPE: DNA (genomic)
 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: Extracellular Form of the Human TITLE OF INVENTION: Fibroblast Growth Factor Receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES:
                                                                                                                                          30 TGCTGGCATGCAGTGCCCTCACAGAGACC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: FILING DATE: 28-DECLASSIFICATION: 53
                                                                                                                                                                                                                                                                                                         TOPOLOGY:
                                                                                                                                                                                                                                                                                                                   STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                     LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4, Application US/07997133
o. 5288855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INFORMATION:
                                                                                                                                                                                                                                                                                                                                  nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1755 Jefferson Davis Highway, Fourth Floor
                                                                                                                                                                                                                                                                                                                                                   30 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mazue,
Isacchi, Antonella
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sarmientos, Paolo
                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Roncucci,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bergonzoni, Laura
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Isacchi, Antonella
                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28-DEC-1992
                                                                                                                                                                                                                                                                                                                       unknown
                                                                                                                                                                                                                      0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Guy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Romeo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US/07/997,133
                                                                                                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 769-226-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                       Score 25.8;
Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No. 1.3e+02;
); Mismatches 0;
                                                                                                                                                                                                                         .5e+03
                                                                                                                                                                                                                                      DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
```

Roncucci, Romeo

```
Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 8
US-08-859-998-431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; MOLECULE TYPE: DNA (genomic) US-07-997-133-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 4:
Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: (703)486-2347
TELEX: 248855 OPAT UR
INFORMATION FOR SEQ ID NO: 4
SEQUENCE CHARACTERISTICS:
LENGTH: 30 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION UNDER: US/07/642,755
FILLING DATE: 18-JAN-1991
ATTORNEY/AGENT INFORMATION:
NAME OF THE OFFICE OFFICE OFFICE OF THE OFFICE OFFICE OFFICE OFFICE OFFICE OFFICE OFFICE OFFICE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/997,133
FILING DATE: 28-DEC-1992
                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatil
                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: METHOD OF ASSAYING DIFFERENTIAL TITLE OF INVENTION: EXPRESSION NUMBER OF SEQUENCES: 1375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Chenchik, Alex
APPLICANT: Jokhadze, George
APPLICANT: Bibilashvilli, Ro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2488 TGTTGGCATGCAGTGCCCTCCCAGAGACC 2516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE/DOCKET NUMBER: 76
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703)521-4500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: Extracellular Form of the Human
                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CITI.
STATE: VII.
22202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30 TGCTGGCATGCAGTGCCCTCACAGAGACC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRANDEDNESS: unknown TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEPHONE: (703)521-45
TELEFAX: (703)486-2347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: Oblon, Norman F
REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDIUM TYPE:
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSEQ for Windows Version 2.0
                                                                                                                                                                                                                                                                                                                               ADDRESSEE: Fish & Richardson, P.C. STREET: 2200 Sand Hill Road, Suite 100
                                                                                                                                                                                        COUNTRY: UZIP: 94025
                                                                                                                                                                                                                                                                                         CITY: Menlo Park
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                431, Application US/08859998
o. 5994076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      l Similarity 93.1%;
27; Conservative
                                                                                                                                                                                                                                                       CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Virginia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sarmientos, Paolo
                                                                                                                                                                                                                         SD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24,618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         769-226-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 25.8; DB 5;
Pred. No. 1.5e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
```

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 9
US-08-859-998-432/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-859-998-431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER: 090:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-322-5070
TELEPAX: 415-854-0875
INFORMATION FOR SEQ ID NO: 431:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 432, Application US/08859998 Patent No. 5994076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
TELEFAX: 415-854-0875
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Chenchik, Alex APPLICANT: Jokhadze, George APPLICANT: Bibilashvilli, RC TITLE OF INVENTION: METHOD CONTITLE OF INVENTION: EXPRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE: OTHER INFORMATION: oligonucleotide primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 21-MAY-1
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                              COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTORNEY/AGENT INFORMATION:
                                     TELECOMMUNICATION INFORMATION: TELEPHONE: 415-322-5070
                                                                     ATTORNEY/AGENT INFORMATION:
NAME: Field, Bret E.
REGISTRATION NUMBER: 37,620
REFERENCE/DOCKET NUMBER: 09)
                                                                                                                                                                           CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      768 GCTCCATGCTGTGCCTGCGGCCAAC 792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                              STREET: 2200 Sand
CITY: Menlo Park
STATE: CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRANDEDNESS: si
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REGISTRATION NUMBER:
                                                                                                                                                                                                                APPLICATION NUMBER: US/0 FILING DATE: 21-MAY-1997
                                                                                                                                                                                                                                                                                                                                                                ZIP:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: nucleic acid
                                   TELEPHONE:
                                                                                                                                                              APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                             COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE: Fish & Richardson, P.C. STREET: 2200 Sand Hill Road, Suite 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 GCTCCATGCTGTGCCTGCGGCCAAC 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ocal Similarity
es 25; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                94025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Field, Bret E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25 base pairs
                                                                                                                                                                                                                                                                                                                                                                               SD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                             Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21-MAY-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      villi, Robert
METHOD OF ASSAYING DIFFERENTIAL
EXPRESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                us/08/859,998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  37,620
                                                                                                                                                                                                                                     us/08/859,998
                                                                        09096/002001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 25; DB 2;
; Pred. No. 2.1e+(
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   09096/002001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2.1e+03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Caps
```

0;

```
ş
                                                                                                   OTHER INFORMATION: ; SEQUENCE DESCRIPTION: SI US-09-225-928-431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 10
US-09-225-928-431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-08-859-998-432
                                                   Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 431, Application US/09225928 Patent No. 6352829 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local :
                                                                                                                                                                                TELEFAX: 415-854-0875
INFORMATION FOR SEQ ID NO: 431:
SEQUENCE CHARACTERISTICS:
LENGTH: 25 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1179 GCCCGACGGCCTGCCCTACCTCAAG 1203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA
768 GCTCCATGCTGTGCCTGCGGCCAAC 792
                                                 Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity 100.0%;
nes 25; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH:
TYPE: n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OTHER INFORMATION: oligonucleotide primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/225,928
FILING DATE: 05-Jan-1999
CLASSIFICATION: <Unknown>
                                                                                                                                                  FEATURE:
                                                                                                                                                                                                                                                                                                       TELECOMMUNICATION INFORMATION: TELEPHONE: 415-322-5070
                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/859,998
EILING DATE: 21-MAY-1997
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ZIP: 94025
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 2200 Sand Hill Road, Suite 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bibilashvilli, Robert
TITLE OF INVENTION: METHOD OF ASSAYING DIFFERENTIAL
EXPRESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Chenchik, Alex
Jokhadze, George
                                                                                                                                                                      MOLECULE TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                     NAME: Field, Bret E. REGISTRATION NUMBER: 37,620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CITY: Menlo Park
STATE: CA
                                                                                                                                                                                                                                                                                                                                   REFERENCE/DOCKET NUMBER: 09096/002001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25 base pairs
                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bibilashvilli,
                                                   100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.6%; Score 25; DB 2; 00.0%; Pred. No. 2.1e+(
                                                                                                                 N: oligonucleotide primer SEQ ID NO: 431:
                                            Score 25; DB 4; Pred. No. 2.1e+03
                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2.1e+03
                               0;
                                                             Length 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 25;
                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0,
                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            멍
```

```
OTHER INFORMATION: oligonucleotide primer; SEQUENCE DESCRIPTION: SEQ ID NO: 432: US-09-225-928-432
                                                                                                                                                                                           RESULT 12
US-08-451-822A-10
                                                                                                                                                                                                                                                                                 몽
                                                                                                                                                                                                                                                                                                                     ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT: 11
US-09-225-928-432/c
                                                                                                                                                        Sequence 10, Application US/08451822A Patent No. 5863888
                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity
Matches 25; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 432, Applicat Patent No. 6352829 GENERAL INFORMATION:
              GENERAL INFORMATION:
APPLICANT: Dionne, Craig A
APPLICANT: Crumley, Greg
APPLICANT: Jaye, Michael C
APPLICANT: Schlessinger, Joseph
TITLE OF INVENTION: Fibroblast Growth Factor Receptors
NUMBER OF SEQUENCES: 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INFORMATION FOR SEQ ID NO: 432:
                                                                                                                                                                                                                                                                                                              1179 GCCCGACGGGCTGCCCTACCTCAAG 1203
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                           25 GCCCGACGGGCTGCCCTACCTCAAG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 GCTCCATGCTGTGCCTGCGGCCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTORNEY/AGENT INFORMATION:
NAME: Field, Bret E.
REGISTRATION NUMBER: 37,620
REFERENCE/DOCKET NUMBER: 090
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-322-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FESTSED for Windows Version
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/225,928
FILING DATE: 05-Jan-1999
CLASSIFICATION: <UNKnown>
PRIOR APPLICATION DATA:
OF THE PRIOR OF THE PRIOR APPLICATION DATA:

PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 2200 Sand Hill Road, Suite 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
LENGTH: 25 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: lin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bibilashvilli, Robert
TITLE OF INVENTION: METHOD OF ASSAYING DIFFERENTIAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Chenchik, Alex
Jokhadze, George
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES: 1375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 08/859,998 FILING DATE: 21-MAY-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CITY: Menlo Park
STATE: CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: 415-854-0875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Application US/09225928
                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SD
                                                                                                                                                                                                                                                                                                                                                                           0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EXPRESSION
                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                           Score 25;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       09096/002001
                                                                                                                                                                                                                                                                                                                                                                                              DB 4;
                                                                                                                                                                                                                                                                                                                                                                           2.1e+03
                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                           Length 25;
                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                    Gaps
```

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 13
US-08-323-430-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-08-451-822A-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REGISTRATION NUMBER: 29,699
REFERENCE/DOCKET NUMBER: A0496E
TELECOMMUNICATION INFORMATION:
TELEPHONE: (610) 454-3816
TELEPAX: (610) 454-3808
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
LENGTH: 45 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                       Patent No. 6344546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION: 435

CLASSIFICATION: 435

PRIOR APPLICATION NUMBER: US 08/323,430

FILING DATE: 14-OCT-1994

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/934,372

FILING DATE: 21-AUG-1992

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/549,587

FILING DATE: 06-JUL-1990

ATTORNEY/AGENT INFORMATION:
NAME: Savitate Us 07/549,587
                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
APPLICANT: Dionne, Craig A
APPLICANT: Crumley, Greg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARRE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                       NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                        APPLICANT: Crumley, Greg
APPLICANT: Jaye, Michael C
APPLICANT: Schlessinger, Joseph
TITLE OF INVENTION: Fibroblast Growth Factor Receptors
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRANDEDNESS: Since TOPOLOGY: linear MOLECULE TYPE: cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION DATA:
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: FILING DATE: 26-MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE: Rhone-Poulenc Rorer Legal Department STREET: 500 Arcola Road CITY: Collegeville STATE: PA
                                                                                                                                                                   CITY: Collegeville
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      / Match 0.6%; Score 25; DB Local Similarity 100.0%; Pred. No. 2.7 nes 25; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE:
                                                                                                                                  COUNTRY:
                                                                                                                                                   STATE:
                                                                                                                                                                                         STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY:
                                                                                                                                                                                                         ADDRESSEE:
                                                                                                            19426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Savitzky, Martin
                                                                                                                                                   PA
                                                                                                                                                                                       E: Rhone-Poulenc Rorer Legal Department
500 Arcola Road
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     USA
                                                                                                                                  USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26-MAY-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US/08/451,822A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2.7e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 45;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
```

```
TOPOLOGY: linear; MOLECULE TYPE: cDNA US-08-323-430-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 14
US-08-371-001-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 4, Application US/08371001 Patent No. 5783683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 25; Conserv
                                                                                                          TELEFAX: (619) 236-10 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: (215) 454-3808 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
APPLICATION NUMBER: US to be assist FILING DATE: 21-AUG-1992
APPLICATION NUMBER: US 07/549,587
FILING DATE: 06-JUL-1990
ATTORREY/AGENT INFORMATION:
                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION DATA:
APPLICATION US/08/371,001
FILING DATE: January 10, 1995
CLASSIFICATION: 435
CLASSIFICATION: 435
                                                                                                                                                                              CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Brotman, Harris F.
REGISTRATION NUMBER: 35,
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELECOMMUNICATION INFORMATION:
TELEPHONE: (215) 454-3817
                                                                  SEQUENCE CHARACTERISTICS:
LENGTH: 24 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
MOLECULE TYPE:
                                                                                                                                              TELECOMMUNICATION INFORMATION: TELEPHONE: (619) 699-3630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            271 ACCATGGTCAGCTGGGGTCGTTTCA 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                          STREET: 401 "B"
CITY: San Diego
STATE: CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21 ACCATGGTCAGCTGGGGTCGTTTCA 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Goodman, Rosanne REGISTRATION NUMBER: 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY: U
ZIP: 92101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEPHONE:
                   TOPOLOGY:
                                  STRANDEDNESS:
                                                                                                                                            TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE/DOCKET NUMBER:
                                                 nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            45 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               E: Gray Cary Ware & Freidenrich 401 "B" Street, Suite 1700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Morrison Ph.D., Richard
                                                                                                                                                                                                                                                                                                                                                                                                                                         USA
                                                                                                                           (619) 236-1048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
Other Nucleic Acid
                                single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.6%; Dred. No.
y 100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Tumor Cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US to be assigned
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US/08/323,430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       32,534
                                                                                                                                                                                                   35,461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A0496
                                                                                                                                                                                  P00095US0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      and Composition for Treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 4; L
2.7e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
```

```
TELEFAX: (610) 454-3808
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
LENGTH: 24 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: CDNA
US-08-451-822A-11
Search completed: December 11, 2002, 17:47:48 Job time: 105 secs
                                                                                     뭉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 15
US-08-451-822A-11/c
Sequence 11, Application US/08451822A
Patent No. 5863888
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                       Ouery Match 0.6%; Score 24; DB 2; L
Best Local Similarity 100.0%; Pred. No. 3.6e+03;
Matches 24; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/451,822A
FILING DATE: 26-MAY-1995
CLASSIFICATION DATA:
APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.6%; Score 24; DB 1; L
Best Local Similarity 100.0%; Pred. No. 3.6e+03;
Matches 24; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 07/934,372
FILING DATE: 21-AUG-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/549,587
FILING DATE: 06-JUL-1990
ATTORNEY_AGENT INFORMATION:
NAME: Savitzky, Martin
                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: Savitzky, Martin
REGISTRATION NUMBER: 29,699
REFERENCE/DOCKET NUMBER: A0496E
TELECOMMUNICATION INFORMATION:
TELEPHONE: (610) 454-3816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Dionne, Craig A
APPLICANT: Crumley, Greg
APPLICANT: Jaye, Michael C
APPLICANT: Schlessinger, Joseph
TITLE OF INVENTION: Fibroblast Growth Factor Receptors
NUMBER OF SEQUENCES: 19
CORRESPONDENCE ADDRESS:
ADDRESSEE: Rhone-Poulenc Rorer Legal Department
STREET: 500 Arcola Road
CITY: Collegeville
                                                                            COUNTRY: USA
ZIP: 19426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PA
                                                                                                                                                                                               Length 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 24;
                                                                                                                                                            Indels
                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0,
                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
```

THIS PAGE BLANK (USPTO)

```
Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OM nucleic - nucleic search, using sw model
                                                                          c
                                                                                                           ်ဝဲက ဂု
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Minimum DB seq length: 0
Maximum DB seq length: 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Searched:
               420780
                                                                                                                                                                                                                                                  Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                             Score
            32
30
26.2
25.8
25
25
25
25
                                                                                                                                                                             Match
                                                                                                                                                                                           Query
                                                                                                                                                                                                                                                                                                                             IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     December 11, 2002, 14:31:32; Search time 551 Seconds (without alignments) 17443.791 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2185239 seqs, 1125999159 residues
                                                                                                                                                                                                                                                                                                               | SIDS2/gcgdata/geneseq/geneseqn-embl/NA1980.DAT:*
| SIDS2/gcgdata/geneseq/geneseqn-embl/NA1981.DAT:*
| SIDS2/gcgdata/geneseq/geneseqn-embl/NA1982.DAT:*
| SIDS2/gcgdata/geneseq/geneseqn-embl/NA1983.DAT:*
| SIDS2/gcgdata/geneseq/geneseqn-embl/NA1983.DAT:*
| SIDS2/gcgdata/geneseq/geneseqn-embl/NA1985.DAT:*
| SIDS2/gcgdata/geneseq/geneseqn-embl/NA1986.DAT:*
| SIDS2/gcgdata/geneseq/geneseqn-embl/NA1986.DAT:*
| SIDS2/gcgdata/geneseq/geneseqn-embl/NA1986.DAT:*
| SIDS2/gcgdata/geneseq/geneseqn-embl/NA1986.DAT:*
| SIDS2/gcgdata/geneseq/geneseqn-embl/NA1986.DAT:*
| SIDS2/gcgdata/geneseq/geneseqn-embl/NA1990.DAT:*
| SIDS2/gcgdata/geneseq/geneseqn-embl/NA1991.DAT:*
| SIDS2/gcgdata/geneseq/geneseqn-embl/NA20001.DAT:*
| SIDS2/gcgdata/geneseq/geneseqn-embl/NA20001.DAT:*
| SIDS2/gcgdata/geneseq/geneseqn-embl/NA20002.DAT:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N_Geneseq_101002:*
             00000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GenCore version Copyright (c) 1993 - 2002
                                                                                                                                                                         Length
          32
30
30
30
30
30
25
25
25
42
            13
18
19
22
12
12
24
24
13
                                                                                                                                                                         H
        AAQ23618
AAT63287
AAV05593
AAL23999
AAQ13399
ABK66343
ABK66344
AAX84630
AAQ23619
                                                                                                                                                                                                                        SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5.1.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2166140
3'mbek - a bek pro
Probe for amplifie
Probe for FGF rece
Human SNP oligonuc
Probe OAB984 for b
Human gene specifi
Oligomer used in D
Bek4A - a PCR prim
                                                                                                                                                                    Description
```

YX Tq	DR DR	XXX	× P R	Y PF	Y B ?	Y P N	S X	X Z Z	XX	X B	ž č	RES AAQ ID		0.0	იი	o +	იი	o			C	0 (0 0	იი	o	0.0	0.0		α	C	Ω		n	(ი
New tre	Dionne WPI; 1 P-PSDB	(RORE	- 90	03	N	_		Bacter: PGDF; t	ω	21-		SULT 1 023618/c AAQ23		ι U	443	42	40	300	37 87	დ ს ტ ს	ω υ 0 4 1	201	30	28 29	27	25	236	221	19 20	18	16	л <u>г</u> я 4	13 Z	11.	10
fibrobla ting gf-	ine CA, C 1992-056 3DB; AAR20	RE) RORER	JUL-1990;	-JUL-1991;	3-JAN-1992.	WO9200999-A.	Synthetic.	ially tyros	'mbek - a be	MAY-1992	AAQ23618;	3618 s		22.2	22.4	22.4	22.6	22.6	22.6	22.6	22.6	22.0	22.8	23 23	23.4	23.4	23.6	23.6	23.6 23.6	24 24	24	24,2	24.6 24.4	24.6	24.8
ac :	rumley 827/07. 750.	INI	90US-	91WO-US0474				expressed ine kinase;	ek probe	(first		tandard; D			•															0.6					
h factor re conditions	Ģ.	HOLDINGS	0549587	US04				~	•	entry		DNA;		50	46	42	280	50	50	49	48	4.4	3.	41	31	4 4 0 0	50	- 4 n	31	4 2 5 4	24	47	40	31	٥
tor	Jaye	šš.	587.	745.				inase; ss.		Č		32 BP		2	- +-	\sim	0 4	ω_{κ}	<i>y</i> (5)	NΦ	Ç	\sim	001	S	ω	4	N	. 4	- 2	1 7 22	ω	-00	\sim	NK	J
receptor proteins - use nns e.g. angiogenesis of	MC, Schlessinger J;							; CFS-1;				٠.	ALIGNMENTS	AAL29199	AAS95731	AAL31043	ABN89414	AAF60897 AAS58336	AAQ66922	AAV41447 AAF98419	AAX52599 AAN71061	AAL28459 .	AAX84629	AAL30410	AA130469	AAS95735	AAI75629	ABN75039	AAF58623	AAT31054 AAL28218	AA266994 AAQ23620	AAX52549	AAA98316	AAL29254 AAI30470	* ncoc r *
eful in f tumours,														n map	Allele discriminat	Human SNP oligonuc	Polymorphism detec	Conjugate forming cDNA #1012 encodin	Poly-dA 50mer prob	Nucleotide sequenc	<pre>Human genome biall 5'-3' probe for ex</pre>	Human SNP oligonuc	Oligomer used in D	Human SNP oligonuc	CNS disorder-relat	HHV6 virus p41 gen Allele discriminat	Human SNP oligonuc Human silent SNP c	Human aCl wt cMNR	Murine c-kit exon	Human fibroblast g	Human map-related BeklB- a PCR prime	Human genome biall		Human SNP oligonuc Human single nucle	

```
ARESULT 2
AAT632
XX
XX
AAT632
XX
XX
AAT632
XX
Z1-MAY
XX
CORNEB
KW CORNEB
KW CESSED
XX
CORNEB
KW CESSED
XX
CORNEB
XX

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5341-5341 1988). The fragment obtd. was amplified by Bek4A (AAO23619) and Bek1B (AAO23620) primers, and the obtd. full length bek clone was subs- equently sequenced and the protein sequence deduced. Receptor proteins encoded by this cDNA sequence may be used in pharmaceutical compans. to inhibit undesirable heparin-binding growth factor mediated cellular responses or to inhibit the binding of an opportunistic pathogen to human cells. Such undesirable responses may be growth factor stimulated angiogenesis and vascularisation of tumours, mitogenic effects in psoriasis, arthritis, atherosclerosis and benign prostatic hypertrophy. The derived bek protein may also be used for screening drugs. See also AAO21003,4 and AAO23610-7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The oligonucleotide 3'mbek was used screen a one day old human brain stem library as it is complementary to the 3' end of the partial murine bek coding sequence (Kornbluth et al., Mol. Cell Biol. 8: 5541-5544 1988). The fragment obtd. was amplified by Bek4A (AAQ23619) and Bek1B (AAQ23620) primers, and the obtd. full length bek clone was
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Cornea; proliferation; in vivo; hepatocyte growth factor; injury; PCR; keratinocyte growth factor; ocular surgery; epithelium; endothelium; expression; receptor; polymerase chain reaction; amplification; primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2708 ATCCACACATAAACGCCAGTGTTAAAACATGA 2739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure; Page 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               mitogenic effects in psoriasis, arthritis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US5589451-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21-MAY-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAT63287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAT63287 standard;
                                  The invention relates to methods for promoting corneal cell proliferation in vivo by treating the cells with hepatocyte growth factor (HGF) and optionally keratinocyte growth factor (KGF). Methods for suppressing corneal cell growth include administering Ca ions to the
                                                                                                                                                                                                                                                                           Promoting or suppressing corneal cell proliferation - hepatocyte growth factor or calcium lons resp., e.g. i corneal injury or for preserving corneal tissue prior
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31-DEC-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (TEXA ) UNIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21-SEP-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21-SEP-1992;
                                                                                                                                                                                             Example 1; Column 11-12;
                                                                                                                                                                                                                                                     transplantation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      healing; beta-actin; upstream;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATCCACACATAAACGGCAGTGTTAAAACATGA 1
                                                                                                                                                                                                                                                                                                                                                                                                             1997-076878/07.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
The methods are used for the treatment of corneal tissue injury
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     amplified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP; 6 A; 5 C; 7 G; 14 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TEXAS SYSTEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9208-0947683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9205-0947683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     fragment of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       65pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30
                                                                                                                                                                                          25pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 32;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             downstream;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FGF receptor gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 13; I
2.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             intron; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 32
                                                                                                                                                                                                                                                                                    for treating r to
                                                                                                                                                                                                                                                                                                                                               using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   the partial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
```

```
888888888888888
                                                                           following accidental injury, ocular surgery or due to corneal disorders caused by abnormal healing processes of the corneal epithelium and endothelium. The methods are based on the discovery that corneal tissue can express mRNA for HGF, KGF and their respective receptors. The discovery was shown by PGR amplification using the primers AAT63273-87. This probe is used to detect the 205 bp fragment amplified from the fibroblast growth factor (FGF) receptor 2 cDNA by primers AAT63283 and AAT63286. The probe corresponds to nucleotides 30-59 of the FGF receptor
                                                      gene.
```

```
Best Loc
Matches
                                       Query Match
Sequence
                                 Local
                           30;
                                  Similarity
                                                     30
                                                     BP;
                           Conservative
                                                      11
                                                     A; 7 C; 4 G;
                                 0.7%;
                           0;
                                  Score 30;
Pred. No.
                                                     8 T; 0 other;
                           Mismatches
                                  DB 18; 1
8.7e+02;
                                       Length 30
                            Indels
                           0,
                            Gaps
```

Ş 망

```
RRESULT 3
ANVO 503/
ID ANVO 503/
AC ANVO XX ANVO XX ID Prob
XX Inhi
KW Inhi
KW Inhi
KW Hepa
XX INH
KW Hepa
XX INH
KW Hepa
XX INH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAV05503 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              hepatocyte growth factor; HGF; keratinocyte growth factor; dry eye; keratoconjunctivitis sicca; probe; receptor; fibroblast growth factor; FGF; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-MAY-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAV05503;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US5703047-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          fibroblast growth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Probe for FGF receptor DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-DEC-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Inhibition;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         corneal epithelial cell; differentiation; treatment;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30
```

```
WPI; 1998-076459/07
                           Wilson
                                                                             09-MAR-1995;
21-SEP-1992;
                                                                                                                    09-MAR-1995;
                                                 (TEXA ) UNIV
                                                     TEXAS SYSTEM
                                                                             95US-0400323.
92US-0947683.
                                                                                                                    95US-0400323.
```

The present sequence was used in the development of a novel method for the inhibition of corneal epithelial cell differentiation. The method comprises contacting the cells with a hepatocyte growth factor (HGF) and/or keratinocyte growth factor (KGF). When HGF and KGF are both used, the cells can be contacted with them sequentially or simultaneously. The HGF and/or KGF is in a timed release delivery system, especially comprising biodegradable polymer microcapsules. The HGF and/or KGF are administered topically. The method is used for treating dry eye, especially Sequence keratoconjunctivitis sicca. 30 BP; 11 A; 7 C; 4 G; 8 T; 0 other;

Example 1; Columns 17-18;

36pp; English

Inhibition of corneal cell differentiation - by growth factor and/or keratinocyte growth factor

using

hepatocyte

0.78; 30; В 19;

Length

Ş

323

```
The present invention relates to oligonucleotides encoding polymorphic CC variants of proteins related to amylases, amyloid proteins, angiopoietin, CC apoptosis related proteins, cadherin, cyclin, polymerase, oncogenes, CC histones, kinases, colony stimulating factors, complement related CC proteins, cytochromes, kinesins, cytokines, interferons, interleukins, CC G-protein coupled receptors and thioesterases. The present sequence is CC one such oligonucleotide, The oligonucleotides and the peptides encoded CC by them may be used in the prevention, diagnosis and treatment of CC diseases associated with inappropriate expression of the proteins listed CC above. Disorders that may be prevented, diagnosed and/or treated include CC multifactorial diseases with a genetic component, such as autoimmune CC diseases (e.g. rheumatoid arthritis, multiple sclerosis, diabetes, CC systemic lupus erythromatosus and Grave's disease, inflammation, cancer CC (e.g. cancers of the bladder, brain, breast, colon and kidney, leukamentania), diseases of the nervous system and an infection of pathogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 4
AAL29297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
        Query Match
Best Local S
Matches 31
                                                                                                                                                                                                                                                                                                                                                                                                      Polymorphic nucleic acids encoding e.g. amylases, cyclins, polymerases, oncogenes and histones, useful for diagnosing and treating, e.g. cancer, autoimmune diseases and infections -
                                                                       Sequence 50
                                                                                                                                                                                                                                                                                                                                                                                  Claim 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2001-465210/50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Shimkets RA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28-DEC-1999; 99US-0173419.
27-DEC-2000; 2000US-0173419.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-JUL-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200147944-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Immunosuppressive; immunostimulatory; antiinflammatory; cytostatic; neuroprotective; antimicrobial; gene therapy; vaccine; amylase; cancer; amyloid protein; angiopoietin; apoptosis related protein; cadherin; cytolin; polymerase; oncogene; histone; kinase; colony stimulating factor; complement related protein; cytochrome; kinesin; cytokine; interferon; interleukin; G-protein coupled receptor; thioesterase; inflammation; multifactorial disease; autoimmune disease; infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               28-DEC-2000; 2000WO-US35498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human SNP oligonucleotide #2505.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          nervous system
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAL29297;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAL29297 standard; DNA; 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local
                    similarity 79.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
30; Conserv
                                                                                                                                                                                                                                                                                                                                                                             Page 2100; 4143pp; English.
                                                                       BP;
        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                       7 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        disease; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Z
                                                                  17 C; 14 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ВP
      0
                Score 26.2; DB 2
Pred. No. 1e+04;
     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pred. No. 8.7e+02;
                                                                  12 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                DB 22;
     8;
   Indels
                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                 50;
 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
```

```
RESULT 6
ABK66343
ID ABK6
XX ABK6
XX ABK6
XX ABK6
XX PS-J
XX Huma
XX Prim
XX Prim
XX Homc
XX Homc
XX US63
XX US63
XX US63
                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 5
AAQ13309/c
ID AAQ13309 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                  Query Match
Best Local
                    US6352829-B1
                                                           Primer;
                                       Homo sapiens
                                                                              Human gene specific PCR primer
                                                                                                    02-JUL-2002
                                                                                                                        ABK66343;
                                                                                                                                          ABK66343 standard; DNA;
                                                                                                                                                                                                               2488 TGTTGGCATGCAGTGCCCTCCCAGAGACC 2516
                                                                                                                                                                                                                                                                           Sequence 30 BP; 5 A; 8 C; 11 G; 6 T; 0 other;
                                                                                                                                                                                                                                                                                                 The probe was used to screen a human placental lambda gtll library for the gene encoding basic FGF receptor. It was of from the partial CDNA clone published by Ruta et al, 1988. See also AAO13308-Q13311.
                                                                                                                                                                                                                                                                                                                                                                                Extracellular form of human fibroblast growth factor receptor used to treat tumours, abnormal angiogenesis e.g. diabetic retinopathy, rheumatoid arthritis and arteriosclerosis and as
                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1991-252611/34.
                                                                                                                                                                                                                                                                                                                                                  Example 1; Page 11; 29pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                               Bergonzoni L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (FARM ) FARMITALIA C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21-JAN-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 08-AUG-1991.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     W09111459-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Basic fibroblast growth factor; human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Probe OAB984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28-OCT-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAQ13309;
                                                                                                                                                                                               30
                                                                                                                                                                                                                                                госат
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11
                                                                                                                                                                                            TGCTGGCATGCAGTGCCCTCACAGAGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCCTGTCCCCAGGCCAGCCCTCCTTCAGGGGAGTTGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCTTGTCCCTGGCCCGGCCCTCCTTCAGTTTAGTTGAGG
                                                          ss;
                                                                                                                                                                                                                                      . Similarity 27; Conserv
                                                                                                 (first entry)
                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                for bFGF receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                Mazue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       90GB-0001466.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           91WO-EP00103
                                                       microarray; differential expression analysis; human
                                                                                                                                                                                                                                              0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                               G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ERBA SRL.
                                                                                                                                            25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                             Isacchi A,
                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                               Score 25.8;
Pred. No. 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA.
                                                                                                                                                                                                                                     Mismatches
                                                                              #431.
                                                                                                                                                                                                                                                                                                                                                                                                                                            Roncucci R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SS.
                                                                                                                                                                                                                                               .6e+03
                                                                                                                                                                                                                                                     DB 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               49
                                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                            Sarmientos P;
                                                                                                                                                                                                                                                        30;
                                                                                                                                                                                                                                                                                                                 designed
                                                                                                                                                                                                                                                                                                                             CDNA
                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                  0
```

```
The invention relates to producing a sub-population of labeled nucleic acids (NAs) comprising contacting a NA sample from a physiological councies, with a pool of 50 distinct gene specific primers under sultable conditions to enzymatically generate sub-population of NAS, where canh gene specific primer has a sequence complementary to a distinct man, and each labeled NA is generated using a single gene specific CC primer. The method is useful for producing a sub-population of labeled CC NAS which is useful for analysing the differences in the RNA profiles between several different physiological sources, where the method CC comprises producing subpopulation of labeled NAs for the different CC physiological sources, comprising the populations for each physiological sources to identify differences in the populations for each physiological cource to identify differences in the population, where the comparison CC is preferably performed by hybridising the labeled NAS for the Comparison CC distinct physiological sources to an array of probe NAS stably associated with the surface of a substrate to produce a hybridisation CC the sources, where differential gene expression assays are cutilised in differential expression analysis of diseased a normal CC subtissue types. The present sequence is a human gene specific PCR CC Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic for the printed specification, but was obtained in electronic
밁
                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                           ABK66344/c
                                                                                                                                                                                                                                                                                                             RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local S
Matches 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 3; SEQ ID No 431; 11pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              producing sub-population of labeled nucleic acids, useful for analysing
differences in RNA profiles between several different physiological
sources, using set of distinct gene specific primers .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2002-314699/35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (CLON-) CLONTECH LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         05-JAN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 of the printed specification, but format directly from USPTO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 25
05-JAN-1999;
                                  05-MAR-2002
                                                                    US6352829-B1
                                                                                                                                      Primer; ss; DNA
                                                                                                                                                                     Human gene specific PCR primer
                                                                                                                                                                                                         02-JUL-2002
                                                                                                                                                                                                                                                                           ABK66344 standard; DNA; 25 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 http.wipo.seqdata.uspto.gov/sequence.html?DocID=6352829B1
                                                                                                                                                                                                                                                                                                                                                                              768 GCTCCATGCTGTGCCTGCGGCCAAC 792
                                                                                                                                                                                                                                                                                                                                                               ب
                                                                                                                                                                                                                                                                                                                                                               GCTCCATGCTGTGCCTGCGGCCAAC 25
                                                                                                                                                                                                                                                                                                                                                                                                                                l Similarity
25; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP; 3 A; 10 C; 7 G; 5 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Jokhadze
                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         97US-0859998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9905-0225928
99US-0225928
                                                                                                                                      microarray; differential expression analysis; human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INC
                                                                                                                                                                                                                                                                                                                                                                                                                                              0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ပ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bibilashvilli R;
                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                Score :
                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                          #432.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     N
O
                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 24;
1.4e+04
                                                                                                                                                                                                                                                                                                                                                                                                                                                  .4e+04;
                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 25
                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                    0:
                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                    0
```

```
The invention relates to producing a sub-population of labeled nucleic conditions (NAs) comprising contacting a NA sample from a physiological countries, with a pool of 50 distinct gene specific primers under suitable conditions to enzymatically generate sub-population of NAs, where ceach gene specific primer has a sequence complementary to a distinct companier. The method is useful for producing a single gene specific primer has a sequence complementary to a distinct companier. The method is useful for producing a single gene specific comprises producing subspopulation of labeled NAs for the RNA profiles between several different physiological sources in the method comprises producing subspopulation of labeled NAS for the different physiological sources, where the method comprises producing subspopulation of labeled NAS for each of the sources in the population, where the comparison is preferably performed by hybridising the labeled NAS for each of the sources to an array of probe NAS stably associated with the surface of a substrate to produce a hybridisation pattern for each of the sources, and comparing the patterns for each of the sources, and comparing the patterns for each of the sources, where tissue, or different tissue or subtissue types. The present sequence is a human gene specific PCR of the printed specification, but was obtained in electronic format directly from USPTO at the process hemispecific process.
                                                                                                                                                                                                                                                                                                             AAX84630
ID AAX8
XX
                                                                                                                                                                                                                                                                                                                                                                                                                         В
Query Match
Best Local S
Matches 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Producing sub-population of labeled nucleic acids, useful for analysing differences in RNA profiles between several different physiological sources, using set of distinct gene specific primers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 3; SEQ ID No 432; 11pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (CLON-) CLONTECH LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                          1179 GCCCGACGGGCTGCCCTACCTCAAG 1203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     http.wipo.seqdata.uspto.gov/sequence.html?DocID=6352829B1
                                                                                                                         DNA obstruction assay; receptor interaction; ligand interaction; biological sample characterisation; diagnosis; diabetes; heart disease; infectious disease; inflammatory disease; neoplastic disorder; autoimmune disease; central nervous system disorder; ss.
                                                                                                                                                                                                                      Oligomer used in DNA obstruction assay.
                                                                                                                                                                                                                                                         16-SEP-1999
                                                                                                                                                                                                                                                                                             AAX84630
                                                                                                                                                                                                                                                                                                                                  AAX84630 standard; DNA; 42
                                                                                        Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity hes 25; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                         25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2002-314699/35
                                                                                                                                                                                                                                                                                                                                                                                                                           GCCCGACGGGCTGCCCTACCTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25 BP; 3 A; 7 C; 11 G; 4 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Jokhadze G,
                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  97US-0859998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Bibilashvilli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 25;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ŏ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.4e+04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Caps
```

24-JUN-1999

WO9931267-A1

```
RESULT 9
ANQ23619
ID ANQ23619
XX ANQ2
XX AQ2
XX AQ2
XX Bek4
XX Bact
KW Bact
KW PGDF
XX WO92
XX WO92
PN WO92
PN 03-J
PF 03-J
XX ROR
PR 06-J
XX WPI;
PN WPI;
PN WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This sequence represents an oligonucleotide used to test a DNA CC obstruction assay for assessing interaction between receptors and CC ligands. The invention relates to a method for the characterisation of CC biological samples, and comprises detecting the binding of individual CC members of a library of molecular probes to molecular components in the CC sample. The method comprises: (a) contacting the sample with a library of molecular probes to bind to their specific binding CC partners; and (b) detecting any binding of individual members of the CC library of molecular probes to molecular components in the sample using a CC library with the sample provides a molecular component in the sample using a library with the sample provides a molecular fingerprint of the sample. CC molecular components such as proteins, glycoproteins, polynucleotides, CC molecular components such as proteins, glycoproteins, polynucleotides, CC can be used for diagnosing a disease or condition in a patient and for CC used for conditions such as diabetes, infectious disease, heart disease, neoplastic disorders, autoimmune disease and cc central nervous system disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local
WPI; 1992-056827/07
                             Dionne CA,
                                                     (RORE ) RORER
                                                                                   06-JUL-1990;
                                                                                                            03-JUL-1991;
                                                                                                                                        23-JAN-1992
                                                                                                                                                                    WO9200999-A.
                                                                                                                                                                                               Synthetic
                                                                                                                                                                                                                     Bacterially expressed kinase; CFS-1; amplification; PGDF; tyrosine kinase; ss.
                                                                                                                                                                                                                                                               Bek4A - a PCR primer.
                                                                                                                                                                                                                                                                                              21-MAY-1992
                                                                                                                                                                                                                                                                                                                            AAQ23619;
                                                                                                                                                                                                                                                                                                                                                  AAQ23619 standard; DNA; 45 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Simultaneous identification of novel biological targets
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 2; Page 53;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18-DEC-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (SEPR-) SEPRACOR INC
                                                                                                                                                                                                                                                                                                                                                                                                                           N
                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity 75.6
31; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Heefner DL,
                         Crumley G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP; 32 A; 2 C; 2 G; 6 T; 0 other;
                                                                                                                                                                                                                                                                                           (first entry)
                                                      INT HOLDINGS.
                                                                                 90US-0549587
                                                                                                            91WO-US04745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              97US-0068035
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          98WO-US26894.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.6%;
75.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 125pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Jones
                          Jaye MC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 25;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Zepp CM;
                      Schlessinger
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.8e+04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
```

```
RESULT 10
AAL29254/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The oligonucleotide 3'mbek (AAQ23618)was used screen a one day old human train stem library as it is complementary to the 3' end of the partial murine bek coding sequence (Kornbluth et al., Mol. Cell Biol. 8: 5541-5544 1988). The fragment obtd. was amplified by Bek4A and Cequently sequenced and the obtd. full length bek clone was subscenceded by this cDNA sequence may be used in pharmaceutical compans: to inhibit undesirable heparin-binding growth factor mediated cellular responses or to inhibit the binding of an opportunistic pathogen to CC human cells. Such undesirable responses may be growth factor stimulated angiogenesis and vascularisation of tumours, mitogenic effects in CC psoriasis, arthritis, atherosclerosis and benign prostatic hypertrophy. CC See also AAQ21003,4 and AAQ23610-7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
Polymorphic nucleic acids encoding e.g. amylases, cyclins, polymerases, oncogenes and histones, useful for diagnosing and treating, e.g. cancer, autoimmune diseases and infections \cdot
                                                                                                                                                                                                                                                                                                                                                           Immunosuppressive; immunostimulatory; antiinflammatory; cytostatic; neuroprotective; antiinfcrobial; gene therapy; vaccine; amylase; cancer; amyloid protein; angiopoietin; apoptosis related protein; cadherin; cyclin; polymerase; oncogene; histone; kinase; colony stimulating factor; complement related protein; cytochrome; kinase; cytokine; interferon; interleukin; G-protein coupled receptor; thioesterase; inflammation; multifactorial disease; autoimmune disease; infection;
                                                                                                                                                                      28-DEC-1999; 99US-0173419.
27-DEC-2000; 2000US-0173419.
                                                                                                                                                                                                                                                       05-JUL-2001.
                                                                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                       (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                       28-DEC-2000; 2000WO-US35498
                                                                                                                                                                                                                                                                                      WO200147944-A2
                                                                                                                                                                                                                                                                                                                                                    nervous system disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human SNP oligonucleotide #2462.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      24-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAL29254 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 45 BP; 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New fibroblast growth factor receptor proteins - useful in treating gf-mediated conditions e.g. angiogenesis of tumours, mitogenic effects in psoriasis, arthritis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 25; 65pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 P-PSDB; AAR20750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                271 ACCATGGTCAGCTGGGGTCGTTTCA 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21 ACCATGGTCAGCTGGGGTCGTTTCA 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local
                                                                        2001-465210/50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    l Similarity
25; Conserv
                                                                                                         RΑ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.6%;
ilarity 100.0%;
Conservative (
                                                                                                       Leach M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; .11 C;
                                                                                                                                                                                                                                                                                                                                                    SS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 25;
; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             12 G; 12 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               red. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.9e+04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 45;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
```

```
The present invention relates to oligonucleotides encoding polymorphic variants of proteins related to amylases, amyloid proteins, angiopoletin, comportosis related proteins, cadherin, cyclin, polymerase, oncogenes, histones, kinases, colony stimulating factors, complement related components, cytochromes, kinesins, cytokines, interferons, interleukins, components, cytochromes, interferons, interleukins, components, coupled receptors and thloesterases. The present sequence is component of the protein coupled receptors and thoesterases. The present sequence is component by them may be used in the prevention, diagnosis and treatment of components associated with inappropriate expression of the proteins listed above. Disorders that may be prevented, diagnosed and/or treated include cultifactorial diseases with a genetic component, such as autoimmune concers of the bladder, brain, breast, colon and kidney, cancer (e.g. cancers of the bladder, brain, breast, colon and kidney, colonarisms), diseases of the nervous system and an infection of pathogenic corpanisms
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Š
덩
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 49
                                                                                                                                                                                                                                                                                                                                                                                                                            Human; resequence; genotype; disease;
single nucleotide polymorphism; SNP; ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAI30470;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAI30470 standard;
                                     Nucleic acid molecules from the human genome which include polymorphic sites, useful in methods for predicting the presence, absence or severity of a particular phenotype or disorder (e.g. diabetes) associated with a particular genotype .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human single nucleotide polymorphism
                                                                                                                                                                                                 07-MAR-2000;
22-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                    Homo
             Claim
                                                                                                              WPI; 2001-522952/57
                                                                                                                                        Cargill M,
                                                                                                                                                                    (WHED
                                                                                                                                                                                                                                           07-MAR-2001; 2001WO-US07268
                                                                                                                                                                                                                                                                                                    WO200166800-A2
                                                                                                                                                                                                                                                                                                                                                           Variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sapiens.
             1; Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        l Similarity
32; Conserv
                                                                                                                                                                       WHITEHEAD INST BIOMEDICAL RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP; 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                           Ireland
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                  2000US-0187510
2000US-0206129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2088; 4143pp; English
             87; 145pp; English
                                                                                                                                                                                                                                                                                                                                              replace(16,G)
/*tag= a
                                                                                                                                                                                                                                                                                                                             /standard_name= "single nucleotide polymorphism"
                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; 3 C; 4 G; 39 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.68;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA;
                                                                                                                                           JS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21
                                                                                                                                           Lander
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 24.8; DB 22; Pred. No. 2.2e+04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                           ES
                                                                                                                                                                                                                                                                                                                                                                                                                                   SS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (SNP) FGFR3
                                                                                                                                                                                                                                                                                                                                                                                                                                               forensic;
                                                                                                                                                                                                                                                                                                                                                                                                                                               paternity testing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         49;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
```

```
888888888
                                                                            The invention relates to the identification of nucleic acid molecules (AAI29513-AAI31314) from the human genome which include polymorphic sites which can predispose individuals to disease. Various genes from a number of individuals were resequenced and single nucleotide polymorphisms (SNPs) in these genes discovered. The method is useful for predicting the presence, absence or severity of a particular phenotype or disorder (e.g. diabetes) associated with a particular genotype. The nucleic acids containing the polymorphic sites may be useful in forensics and paternity
```

```
Query Match
                       Sequence 31 BP; 3 A; 13 C; 12
0.6%;
Score 24.6;
Pred. No. 1
                        G; 3
                         T; 0 other;
          BB
         22;
         Length
          31;
```

```
Matches
                           1034 ACCGGCCCATCCTCCAAGCCGGACTGCCGGC 1064
 \vdash
ACCGGCCCATCCTGCAGGCGGGCTGCCGGC
                                                   Similarity
27; Conserv
  31
```

ş 밁

Local

Conservative

0;

Mismatches

.9e+04;

Indels

0

Gaps

0

AAA98316 standard; DNA: 50

Human mismatch repair gene; hMSH6; disease predisposition; genotype; Human MSH6 fragment 8/exon 8 to 10 DNA Ref-Seq fragment #3

Homo sapiens. neoplastic disease; drug development; ds

mutation;

carcinoma; colorectal; endometrial;

ovarian;

leukemia;

02-FEB-2001

(first entry)

07-SEP-2000 DE19909878-A1

06-MAR-1999; 99DE-1009878

06-MAR-1999; 99DE-1009878

Plaschke J, Kruppa C, (UYDR) UNIV DRESDEN TECH Schackert

WPI; 2000-588378/56.

Novel variants of the human mismatch repair gene, MSH6, useful e.g. determining predisposition to cancer and for development of drugs $\,$ tor

Disclosure; Fig 3; 14pp; German.

ARASHUT 12
ARASH 316
ID ARASH
AC ARASH This invention describes a novel method of determining a predisposition to disease by genotyping a subject's DNA sequence (A) of the human CC mismatch repair gene, MSH6 at specified positions and comparing with CC reference DNA sequences, optionally taking into account all possible CC combinations of variations of the individual mutations, including any CC chosen absolute number of variations. (A), and analysis of their CC sequences, are useful for the following: (1) determining a predisposition CC to disease, especially colorectal, endometrial and ovarian carcinoma and CC leukemia; (ii) determining an increased mutation rate (frequency of base substitutions, insertions and/or deletions) in eukaryotic cells; (ii) CC predicting the progression, severity and survival time of patients with CC chemotherapeutic agents (e.g. cis-platin) or drugs developed from (iv): CC chemotherapeutic agents (e.g. cis-platin) or drugs developed from (iv): C coplasia; (vi) controlling the mutation rate in eukaryotic cells, in vitro or in vivo; (viii) constructing genes and vectors, particularly for

```
RESULT 13
AAT05796/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         , Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           88888×3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
support for the immobilisation of nucleotide sequences. The support molecule is a dial linked to a controlled pore glass particle (CPGP), by a phosphodiester bond. Oligonucleotides can then be linked to the dial, nucleotide segment can then be linked to the dial, nucleotide segment can then be linked to the dial. A protected by tandem ligation. This method can also be used as a continuous source universal primers and diagnostic probes. The immobilised sequences can be used for e.g. gene detection, diagnostic assays, priming of enzymatic
                                                                                                                       The sequences represented by AAT05795 and AAT05796 are oligonucleotides used in the method of the invention. The invention provides a new soli
                                                                                                                                                                                               controlled
                                                                                                                                                                                                                                                                                                                                                                                               CA1336690-C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              systems
systems
                                                                                                                                                                                                                                                                                        (GEOR/)
                                                                                                                                                                                                                                                                                                                  29-SEP-1989;
                                                                                                                                                                                                                                                                                                                                           29-SEP-1989;
                                                                                                                                                                                                                                                                                                                                                                       15-AUG-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   enzymatic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Diol linked oligonucleotide #2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3372 AAAACAATTAATCATTTATAGTTTTTTTTTTGTAATTTAAGTGGCATTT 3418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAT05796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19-APR-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAT05796 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  studying
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         development systems for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     _
                                                                                                                                                                                     support for immobilising nucleotide sequences - comprising troiled pore glass particles, phospho:di:ester linkage and .
                                                                                                                                                                                                                                     1995-320874/42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAAACAAAAAAACTTTTTTTTTTTTTTTTTAATTTTAAGGGAAGTTT 47
                                                                                                                                                                                                                                                                                        GEORGES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ment of pharmaceuticals; (ix) developing diagnostic kits and other for genotyping; and (x) developing in vivo and in vitro test for expressing individual forms of the MSH6 gene, e.g. for g pathophysiology of disease or processes in which MSH6 is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       50 BP; 17 A; 4 C; 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA synthesis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         solid support; diol;
                                                                                                                                                                   Fig 1c;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                89CA-2615014
                                                                                                                                                                                                                                                                                                                                          89CA-2615014.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         support; diol; controlled pore glass particle; CPGP; diagnostic probe; gene detection; diagnostic assay;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             drug development and testing.
                                                                                                                                                                  23pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.6%;
70.2%;
                                                                                                                                                                                                                                                                                                                                                                                                          _base= OTHER

= "T linked to controlled pore glass particle via
new linkage consisting of 1,5 pentanediol or
1,7 heptanediol and a phosphodiester bond, as
follows p-O-P(O)(O-)-O-(CH2)nO- where p is the
controlled pore glass particle and n is 5 or 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SS.
                                                                                                                                                                  English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 24.6; DI
Pred. No. 2.5e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       <u>ن</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 21;
1.5e+04;
14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            50;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                          diol
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        for
is
                                                                                                                                                                                                                                                                                                                                                                                                                 ond, as
p is the
s 5 or 7"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0,
```

```
This invention describes a novel method for obtaining a set of CC biallelic markers represented in AAX52533-X52632 and AAX52833-X52843 for CC use in constructing a high density equilibrium map of the human genome. CC The method involves (a) obtaining a nucleic acid library comprising CC genomic DNA fragments comprising the full genome or a portion CC (b) determining the order of genomic DNA fragments in the genome. CC (c) determining the sequence of selected regions of the genomic DNA CC fragments and (d) identifying nucleotides in the genomic DNA fragments and (d) identifying nucleotides in the genomic DNA fragments of biallelic CC markers. The methods can be used for identifying traits such as disease CC (e.g. Alzheimer's disease, drug response, drug efficacy and drug contictly. They can be used for selecting an individual for inclusion in CC a clinical trial. The method is used to map the position of genes in a CC genome (preferably the human genome). The sequences described in the method CC of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 14
AAX52549
ID AAX5:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    888888×3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                           Production of biallelic markers - by obtaining a genomic DNA library, determining the order and sequence of DNA fragments identifying nucleotides which vary between individuals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Biallelic marker; human; high density disequilibrium map; disease; trait; identification; Alzheimer's disease; drug response; drug ef
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example
                                                                                                                                                                                                                                                                                                                                                             WPI; 1999-132278/11
                                                                                                                                                                                                                                                                                                                                                                                          Blumenfeld M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                  21-APR-1998;
18-JUL-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA synthesis, isolation and purification of DNA binding proteins. The advantage with this method is that the sequences can be deprotected simply by using a solution of NaOH, whereby the oligonucleotides remain attached to the solid phase and the integrity of the nucleotide strand is unaffected. This method is also faster and more efficient than
                                                                                                                                                                                                                                                                                                                                                                                                                    (GEST ) GENSET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28-JAN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO9904038-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAX52549;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAX52549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 42 BP; 5 A; 1 C; 4 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               toxicity;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             genome
                                                                                                                                                                                                                                                                         6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      biallelic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                          Cohen
                                                                                                                                                                                                                                                                                                                                                                                                                                                 98US-0082614
97EP-0401740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98WO-IB01193.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA;
                                                                                                                                                                                                                                                                                                                                                                                  D,
                                                                                                                                                                                                                                                                   288pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     marker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            47
                                                                                                                                                                                                                                                                                                                                                                                        Tchoumakov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ВP
                                                                                                                                                                                                                                                                    English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 24.4;
Pred. No. 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .5e+04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                             and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    efficacy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    remain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0,
```

Sequence

47

₿P;

17 ?

σ ü

15

G

9

H

0 other

```
RESULT 15
AAZ66994
AC AAZ6694
AC AAZ66994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 0.6%;
Best Local Similarity 78.4%;
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ANX65654 to ANX69578 represent human biallelic markers from the present invention, which contain a polymorphic base at position 24 of their nucleotide sequences. ANX69579 to ANX77440 represent amplification primers for the biallelic markers. The biallelic markers of the invention have a variety of uses: they can be used for high density invention have a variety of uses: they can be used for high density impping of the human genome, and in complex association studies and haplotyping studies which are useful in determining the genetic basis for disease states. Compositions and methods of the invention can also be useful for the identification of the targets for the development of pharmaceutical agents and diagnostic methods, as well as the effects from pharmaceutical agents acting on a disease as well as other treatment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human genome; biallelic marker; high density disequilibrium map; genomic map; haplotype; phenotype; polymorphic base; genotyping; haplotyping; hybridisation; identification; characterisation; diagnosis; single nucleotide polymorphism; SNP; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Cohen D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21-APR-1998;
23-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO9954500-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human map-related biallelic marker SEQ ID NO:1341.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10-SEP-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAZ66994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAZ66994 standard; DNA; 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 1; Page 516; 2745pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2000-013267/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28-OCT-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   map of the human genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (GEST ) GENSET.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel biallelic markers used to construct a high density disequilibrium
                                                                                                         Sequence
                                                                                                                                                                                                                                               treatment
                                                                                                                                                                               The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297, are not actually given a sequence in the Sequence Listin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          29;
                                                                                                         47
                                                                                                                                                             present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Blumenfeld M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                         B₽;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98US-0082614.
98US-0109732.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99WO-IB00822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers replace(24,T)
/*tag= a
                                                                                                            17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /standard_name= "single nucleotide polymorphism"
                                                                                                         A; 6 C; 15 G; 9 T; 0 other;
                       0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Chumakov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          дB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 24.2; DB:
Pred. No. 3e+04;
0; Mismatches
                          Score 24.2; DB 21;
Pred. No. 3e+04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                       Length 47;
                                                                                                                                                                                              Sequence Listing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        47;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
```

```
Вр
          ş
                        Matches
           3300 AGAGGTGGAAAAATACTTTTGCTTTCAGGGAAAATGG
9
29;
                         Conservative
                         0.
                         Mismatches
             3336
  $
                          8
                         Indels
                          0;
                          Gaps
```

Search completed: December 11, 2002, 17:45:48 Job time : 557 secs

В ş

```
Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Title:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OM nucleic -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9
2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-954-556-3
4268
1 cccaaggaccactcttctgc......
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                December 11, 2002, 13:33:27; Search time 7153 Seconds (without alignments) 17364.850 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2054640 seqs, 14551402878 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GenEmbl: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GenCore version 5.1.3
Copyright (c) 1993 - 2002 Compugen
                                                                                                                                                                                                                                                                                                                                                           gb_pat: *
gb_ph: *
gb_pr: *
gb_pr: *
gb_ro: *
gb_sts: *
gb_sts: *
gb_v1: *
em_htgo_hum:*
em_htgo_mus:*
em_htgo_other:*
                                                  em_htg_mus:*
em_htg_pln:*
em_htg_rod:*
em_htg_mam:*
em_htg_vrt:*
                                                                                                                                                                                                                            em_pat:*
em_ph:*
                                                                                                                                                                                                                                                                                                                     em_fun:*
em_hum:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gb_htg:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gb_ov:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gb_om:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gb_in:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gb_ba:*
                                                                                                                     em_htg_inv:*
em_htg_other:*
                                                                                                                                               em_htg_hum: *
                                                                                                                                                          em_vi:*
                                                                                                                                                                        em_un:
                                                                                                                                                                                                 em_ro:*
                                                                                                                                                                                                                                                      em_ov:*
                                                                                                                                                                                                                                                                                              em_mu:*
                                                                                                                                                                                      em_sts:*
                                                                                                                                                                                                                 em_pl:*
                                                                                                                                                                                                                                                                   em_or:*
                                                                                                                                                                                                                                                                                 em_om:*
                                                                                                                                                                                                                                                                                                            em_in:*
                                                                                                                                                                                                                                                                                                                                                 em_ba:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .acttaaaaaaaaaaaaaaa 4268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4109280
```

score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

45 13	44 133	13	<u> </u>			115	10	_	10) L	1 43	٠.	, ~	1 18	0 18	φ	œ	27 189	J (ла	- (S K	,	0	9	18 239	7	σ i	15		2 2	, N	0	K)	۵ - د د				· w	N	1	No. S	Result	
	.0	7.	١.`	20.		ع ا	9.0				67.4				28.4	1857	96.2	98.6	77 4	2	2	2310	97.8	97.8	97.8	99.2	99.2	04.4	2437	30	642.4	.0	670.4	81.8	244.8	0 0	00.0	nœ	268	-	O.	core		
30.9	31.2	32.0				٠.	ıα.	8.9		2 0	9.5	. 9		2	2	43.5	-		א ר	- :	٠ -	- 4			σ,	<u>.</u>	6	າ:	":	٦.	61.9	۰,۷	62.6	<u>ن</u> د	76.0	, c	, v	0	0	•	00		Operv	٥
1603	3104	2675	2675	2967	2117	2015	N.	· ~	٠.	110	2621	2310	3037	1954	2716	3025	3013	2711	2272	0000	3120	3306	2941	2876	2868	3071	2826	2923	2455	3080	3809	3244	3244	3106	3240	0 4 0	34L5	4268	4268	26	83	Length		
6	G	σ	G	U	10					9	u			σ	ر.	φ,	۰ م				5	10						۷ م	00	י ע	4	9	0	6	ט מ	9 (o ve	9	6	σ	6	B		
AR007157	XLFGFR2	AR007135	NVI2FGFR	PWFGFR2	RRFIBGFB	RRFIBGFC	AF487553	AC009989	AC009988	AF410480S2	GGBEK	AR007160	MUSKGFR	AR007158	CHRCEK3	HUMKSAMAA	AK026508	BTEGERECE	ARUU/139	HSBFR	t w	MUSBEKFGFA	AB030073	AB030074	AB030076	AB030075	AB030078	AB030077	HIMTX1/	HUMFGFRZA	AF211257	HUMKSAMIII	AX329662	HUMKGERA	HOTOTOOND HOTOTOOND	HOTOTONIA HOTOTONIA	HSFGFRBE	HUMKSAMI	AX336422	X334		ID		SUMMARIES
07157 Sequence	×	713	L19869 Notophthalm	waltl mi	?.rattus	?.rat	Homo	Homo	Homo sap		x61992 G.gallus mR	Sequence		0715	96	M35718 Himan henar	Caurus m	AF184968 OFYCTOLAG		man bfr m	\sim	1.mus		Homo sap		AB030075 Homo sant		Human i		93	257 Cani	E	AX329662 Sequence		H.sapiens		man	Human fib	336422 Sequenc	334117 Sequenc	AX332811 Sequence	cription		

RESULT 1
AX332811
AX32811
AX332811
AX33281
AX332811
AX33281
AX332811
AX332811
AX332811
AX332811
AX332811
AX332811
AX33281
AX3281
AX33281
AX33281
AX33281
AX33281
AX33281
AX33281
AX33281
AX3

ALIGNMENTS

Pred. No.

S

the

number of results predicted by chance to have

```
QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         рь
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                    õ
                                                                            В
                                                                                           Ş
                                                                                                                 В
                                                                                                                                  Ş
                                                                                                                                                       밁
                                                                                                                                                                       Ş
                                                                                                                                                                                            g
                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                     망
                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                       ₽
                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                    ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BASE COUNT
              S
 묽
                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 4268; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                        781
                                                                                                                   661
                                                                                                                                      661
                                                                                                                                                          109
                                                                                                                                                                            601
                                                                                                                                                                                               541
                                                                                                                                                                                                                   541
                                                                                                                                                                                                                                       481
                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                               421
                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                       781
                                                                              721
                                                                                               721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                             CCCAAGGACCACTCTTCTGCGTTTGGAGTTGCTCCCCACAACCCCGGGCTCGTTGCGTTTC 60
                                                                                                                                                                                               GATACCACATTAGAGCCAGAAGAGCCCACCAACCAAATACCAAATCTCTCAACCAGAAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCATCCCGACCCACGCGGGGCGCGGGGACACACACGTCGCGGAGGAGGAGCGTTGCCATTC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCCAAGGACCACTCTTCTGCGTTTGGAGTTGCTCCCCACAACCCCGGGCTCGTCGCTTTC
CCTGCGGCCAACACTGTCAAGTTTCGCCTGCCCAGCCGGGGGGAACCCAATGCCAACCATG
                                                                                      AACAAGAGAGCACCATACTGGACCAACACAGAAAAGATGGAAAAGCGGCTCCATGCTTG
                                                                                                                              TCCGGAGATGATGACACCGATGGTGCGGAAGATTTTGTCAGTGACAACAGTAAC
                                                                                                                                                                                                                                    ATCAGTTGGACTAAGGATGGGGTGCACTTGGGGCCCAACAATAGGACAGTGCTTATTGGG
                                                                                                                                                                                                                                                                            TACGTGGCTGCGCCAGGGGAGTCGCTAGAGGTGCGCTGCCTGTTGAAAGATGCCGCCGTG
                                                                                                                                                                                                                                                                                                                GATACCACATTAGAGCCAGAAGAGCCACCAACCAAATACCAAATCTCTCAACCAGAAGTG
                                                                                                                                                                                                                                                                                                                                                        CTGGTCGTCGTCACCATGGCAACCTTGTCCCTGGCCCGGCCCCTCCTTCAGTTTAGTTGAG
                                                                                                                                                                                                                                                                                                                                                                   CTGGTCGTGGTCACCATGGCAACCTTGTCCCTGGCCCGGCCCTCCTTCAGTTTAGTTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCCATCCCGACCCACGCGGGGGGGGGGGGACAACACACGGTCGCGGAGGAGCGTTGCCATTC
                   CGGTGGCTGAAAAAACGGGAAGGAGGTTTAAGCAGGAGCATCGCATTGGAGGCTACAAGGTA 900
                                                                                                                   TCCGGAGATGATGAGGATGACACCGATGGTGCGGAAGATTTTGTCAGTGAGAACAGTAAC
                                                                                                                                                                   AGTAGGACTGTAGACAGTGAAACTTGGTACTTCATGGTGAATGTCACAGATGCCATCTCA 660
                                                                              AACAAGAGCACCATACTGGACCAACACAGAAAAGATGGAAAAGCGGCTCCATGCTGTG
                                                                                                                                                          AGTAGGACTGTAGACAGTGAAACTTGGTACTTCATGGTGAATGTCACAGATGCCATCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gene sets
Patent: WO 0194629-A 3320 13-DEC-2001;
Avalon Pharmaceuticals (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%;
ilarity 100.0%;
Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ü
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Homo sapiens"
/db_xref="taxon:9606"
h 964 c 1028 g 1077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 4268;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 4268;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60
                                                                                                                                                                                                                    600
                                                                                                                                                                                                                                                                                                                                       420
                                                                                                                                                                                                                                                                                                                                                                             360
                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                      720
                                                                                                                                                                                                                                        540
                                                                                                                                                                                                                                                                              480
                                                                                                                                                                                                                                                                                                                    420
                                                                                                                                                                                                                                                                                                                                                         360
                                                                                                                                                                                                                                                                                                                                                                                               300
                                                                                                 780
                                                                                                                                                           660
                                                                                                                                                                                                  600
                                        84 C
                                                          840
                                                                               780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
            밁
```

Qy	Qy Db	Оу	Оу	Qy Db	Qy Db	Qу Db	Qy Db	Qу	qq VQ	Qy	da Vo	Qy Db	Qy Db	Оу	Qy Db	ογ	Qy
1921 1921	1861 1861	1801	1741 1741	1681 1681	1621 1621	1561 1561	1501 1501	1441 1441	1381 1381	1321 1321	1261 1261	1201 1201	1141 1141	1081	1021 1021	961 961	901
CTTCTTGGAGCCTGCACACAGGATGGGCCTCTCTATGTCATAGTTGAGTATGCCTCTAAA 1 	GATCTGGTGTCAGAGATGGAGATGATGAAGATGATGGGAAACACAAGAATATCATAAAT 1 	GAGGCGGTCACCGTGGCCGTGAAGATGTTGAAAGATGATGCCACAGAGAAGAACACCTTTCT 1	GGTTGCTTTGGGCAAGTGGTCATGGCGGAAGCAGTGGGAATTGACAAAGACAAGCCCAAG 1	GAGGACCCAAAATGGGAGTTTCCAAGAGATAAGCTGACACTGGGCAAGCCCCTGGGAGAA 1 	CGCCTCTCTTCAACGGCAGACACCCCCATGCTGGCAGGGGTCTCCGAGTATGAACTTCCA 1	GTTTCGGCTGAGTCCAGCTCCATGAACTCCAACACCCCGCTGGTGAGGATAACAACA 1	AGCAGCCAGCCGGCTGTGCACAAGCTGACCAAACGTATCCCCCTGCGGAGACAGGTAACA 1	TGTATGGTGGTAACAGTCATCCTGTGCCGAATGAAGAACACGACCAAGAAGCCAGACTTC 1 	ACAGCTTCCCCAGACTACCTGGAGATAGCCATTACTGCATAGGGGTCTTCTTAATCGCC 14	ATATCCTTTCACTCTGCATGGTTGACAGTTCTGCCAGCGGCTGGAAGAGAAAAGGAGATT 13 	CGGAATGTAACTTTTGAGGACGCTGGGGAATATACGTGCTTGGCGGGTAATTCTATTGGG 13 	AAGGTTCTCAAGGCCGCGGGGTGTTAACACCACGGACAAAGAGATTGAGGTTCTCTATATT 12 1	TGGATCAAGCACGTGGAAAAGAACGGCAGTAAATACGGGCCCGACGGGCTGCCCTACCTC 12 	GTCGGAGGAGACGTAGAGTTTGTCTGCAAGGTTTACAGTGATGCCCAGCCCCACATCCAG 11 	GAGCGATCGCCTCACCGGCCCATCCTCCAAGCCGGACTGCCGGCAAATGCCTCCACAGTG 10 	ACCTGTGTGGGGGAGAATGAATACGGGTCCATCAATCACACGTACCACCTGGATGTTGTG 10	CGAAACCAGCACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCTGACAAGGGAAATTAT 96
980	920 920	860	800	740 740	680	620 620	560	500	140	380	120	60	8 8	400	80	20	0 0

1 TGTT	414	Qy	3120	51 TAATTGGAGAAGATTTATGTCAGCACACACTTACAGAGCACAAATGCAGTATATAGGTGC	/ 306	Qy
	4081	Db	3060	01 GCTGTGGACCAGTAGGACTCAAGGTGGACGTGCGTTCTGCCTTCCTT	30	g B
	4081	Qy	3060	01 GCTGTGGACCAGTAGGACTCAAGGTGGACGTGCGTTCTGCCTTCCTT	/ 300	γο
	4021	Db	3000	#	29	Db -
	4021	Qy	2940	- 1	29	φ !
1 TTAA 1 TTAA	396	ДЪ	2940	81 TATGTGTAAAGATTTATACAGTTGAAAACTTGTAATCTTCCCCAGGAGGAGAAAAGGTT 	7 288	, Q
1 TCAT	3901	Db	2880		28	Дb
	3901	Qy	2880		28	ν
1 7776	3841	4g	2820	CAAACAGGACAGCACTIGGGAACCTAGCTACACTGAGCAGGGAGACCATGCCTCCCAGAGC	27	р Q
	3781	d	2760	01	27	, B
	3781	Oy :	2700	01	27	Q 5
ATCC	3721	Db Cy	2700	41 TGTTCTTCAGGAGATGATTCTGTTTTTTCTCCAGACCCCATGCCTTACGAACCATGCCTT	200	} &
	3661	Db	2640	81	25	Db
SI CAAC	3661	Qy		81	25	Qγ
	3601	Db	2580 2580	21 TTCAAGCAGTTGGTAGAAGACTTGGATTCTCACTCTCACAACCAATGAGGAATAC	25	Db 45
)1 AAG	3601	Qγ		_		0
	354	B 5		ol ANGGAACTGTACATGATGATGAGGAGGCTGTTGGGATGCAGTGCCCTCCCAGAGACCAACG [y 246 b 246	B &
TTT	3541	Q 6	2460) · B
. ,	348	y Qy	2460		у 2401	γo
21 ATG	3421	Db			N.	Дb
21 ATG	342	Qy		341 GGGGTGTTAATGTGGGAGATCTTCACTTTAGGGGGCTCGCCCTACCCCAGGGATTCCCGTG	N)	Qy
61 TGG	3361	Оу	2340	2281 ATGGCTCCAGAAGCCCTGTTTGATAGAGTATACACTCATCAGAGTGATGTCTGGTCCTTC		dd VQ
	3301	Db	N	21 GATATCAACAATATAGACTATTACAAAAAGACCACCAATGGGCGGCTTCCAGTCAAGTGG	Db 22	0
01 GAG	3301	Оу		21	22	Qy
	3241	Db			Db 216	6
41 TTT	3241	Qy	222	61	21	γo
<u>н</u>	318	סם	2160	TOTAL TOTA		U 4
81 TAT	318	νg				o 1
21 TGG	31:	ОУ		2041 ATTAACCGTGTTCCTGAGGAGCAGATGACCTTCAAGGACTTGGTGTCATGCACCTACCAG	Qy 20 рь 20	U 0
-	306	ДЪ		81	Db 19	п
=			2040	981 GGCAACCTCCGAGAATACCTCCGAGCCCGGGAGGCCACCCGGGATGGAGTACTCCTATGAC	0y 19	0

																															<u> </u>			
o	н	0			~	_	_	_	_	_		_	_	_	_																			
¥	Db !	0	99 Vy	ф	Qy	Дb	δ	Вb	Qy	Ъ	Ϋ́	рь	ν	Вb	Qy	Ъ	Qy	Δþ	Ωy	Дb	Qy	B	Qy	Ф	VΩ	ф	VΩ	ф	Qy	Db	Qy	Db	Qy	B
4141	081	0	4021 4021		3961	3901	3901	3841	3841	3781	3781	3721	3721	3661	3661	3601	3601	3541	3541	3481	3481	3421	3421	3361	3361	3301	3301	3241	3241	3181	3181	12	3121	3061
TGTTACAAAATTGGAGAAAGTATTTAATAAAACCTGTTAATTTTTATACTGACAATAAAA 420 		40 ACC ACC TO THE TO THE TOTAL THE T	0	TAAGGGATTGCTTTCATCTAATTCTGGCAGGACCTCACCAAAA	ATTCTGGCAGGACCTCACCAAAAGATCCAGCCTCATAC	GGATACGTCCATCTTT 39	CATAGAAAATTGAAACACAGAGTTGTTCTGCTGATAGTTTTTGGGGATACGTCCATCTT	9	TTGATAATGGCTTCCAGACTCTTTGCGTTGGAGACGCCTGTTAGGATCTTCAAGTCCCA 39	60 (CTGGCCTTCTGCTTCTGAGTTGCACATTAATCAGATTAGCCTGATTCTCTTCAGTGAAT 38	7	TCCATTCCTTGAGGACAGACCTTAGTTGAAATGATAGCAGAATGTGCTTCTCTCTGGC	CAACGTCTAACTGGACTTCCCAAGATAAATGGTACCAGCGTCCTCTTAAAAGATGCCTTA 372	AACGTCTAACTGGACTTCCCAAGATAAATGGTACCAGCGTCCTCTTAAAAGATGCCTTA 37	o o	AGAACTCATTCATAGGAAGGTGTTTCATTTTGGTGTGCAACCCTGTCATTACGTCAACG 36	ō (TGTGTTTAAATGCTGCTGTCAGACGATTGTTCTTAGACCTCCTAAATGCCCCCATATTAA 36	ŭ	TTGAAAAGAGAATATTTACAATATATGACTAATTTGGGGGAAAATGAAGTTTTGATTTA	TTATCAGATCC 34	TGCAGGCAGCACAGCAGACTAGTTAATCTATTGCTTGGACTTAACTAGTTATCAGATCC 34	4	GGTAATATACAAAACAATTAATCATTTATAGTTTTTTTTT		AGGTGGAAAAATACTTTTGCTTTCAGGGAAAATGGTATAACGTTAATTTAATAATAAAT 33	TGCTAAATGCTGTTCTTACACATAATTTCTTAATTTTCACCGAGCA 33	TTTAATAGCTATTTGCTAAATGCTGTTCTTACACATAATTTCTTAATTTTCACCGAGCA 33	ATTTTAAATGGATGTCCCAATGCACCTAGAAAATTGGTCTCTCTTT 3	ATTITITGTATTGATTTTAAATGGATGTCCCCAATGCACCTAGAAAATTGGTCTCTCTTT 3		GGATGTATGTAAATATATTCAAATTATGTATAAAATATATAT	
0	0 0	• •	•	0	0	0	0	0 (0	0 (0	0	0	0	0	0	0	0 (0	0	0	0										80		20

망

Ş а

В

```
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 2
AX334117
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                          BASE COUNT
ORIGIN
                                                                                                                                                                                                             Q
                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
                망
                              δÃ
                                                   망
                                                                20
                                                                                    gg
                                                                                                   δÔ
                                                                                                                         B
                                                                                                                                      οy
                                                                                                                                                        Вb
                                                                                                                                                                           Ş
                                                                                                                                                                                               р
                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
õ
                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 4268; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4261
                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                             181
                                                                                                                                                                              181
                                                                                                                                                                                                 121
                  421
                                                                                        301
                                                                                                         301
                                                                                                                           24.1
                                                                                                                                            241
                                                                                                                                                                                                                 121
481
                                   421
                                                     361
                                                                      361
                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                        ب
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCCAAGGACCACTCTTCTGCGTTTGGAGTTGCTCCCCACAACCCCGGGCTCGTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAAAAAAA 4268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAAAAAAA 4268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGTTACAAAATTGGAGAAAGTATTTAATAAAACCTGTTAATTTTTATACTGACAATAAAA
                TACGTGGCTGCGCCAGGGGAGTCGCTAGAGGTGCGCTGCTGTTGAAAGATGCCGCCGTG
                                                                                                CTGGTCGTGGTCACCATGGCAACCTTGTCCCTGGCCCGGCCCTCCTTCAGTTTAGTTGAG
                                                                                                                           AAGTGACTGCAGCAGCGGCAGCGCCTCGGTTCCTGAGCCCACCGCAGGCTGAAGGCA
                                                                                                                                                                                                          AAGTGACTGCAGCAGCAGCGGCAGCGCCTGCGTTCCTGAGCCCCACCGCAGGCTGAAGGCA 180
                                                                                                                                                                                                                                                                     CCCAAGGACCACTCTTCTGCGTTTGGAGTTGCTCCCCACAACCCCGGGCTCGTCGCTTTC
                                                    TATGGAAGAGGACCGGGATTGGTACCGTAACCATGGTCAGCTGGGGTCGTTTCATCTGC
                                                                                        CTGGTCGTCGTCACCATGGCAACCTTGTCCCTGGCCCGGCCCTCCTTCAGTTTAGTTGAG
ATCAGTTGGACTAAGGATGGGGTGCACTTGGGGGCCCAACAATAGGACAGTGCTTATTGGG
                                                                                                                                                                                                                                                                                                                                                                                              gene sets
Patent: WC
Avalon Pha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX334117
Sequence
AX334117
                                                                                                                                                                                                                                                                                                                                                                                                                      Young, P.E., Augustus, M., Carter, K.C., Ebnorigan, S., Soppet, D.R. and Weaver, Z. Cancer gene determination and therapeutic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AX334117.1
                                                                                                                                                                                                                                                                                                                                                    1199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sapiens
                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                               Pharmaceuticals
                                                                                                                                                                                                                                                                                                                                                    œ
                                                                                                                                                                                                                                                                                                                                                                                                        WO 0194629-A 4626 13-DEC-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4626
                                                                                                                                                                                                                                                                                                                                                   /organism="Homo sapiens"
/db_xref="taxon:9606"
964 c 1028 g 107
                                                                                                                                                                                                                                                                                                                                                                                    armaceuticals (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GI:18124836
                                                                                                                                                                                                                                                                                                                100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         from Patent W00194629
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chordata; Craniata; Vertebrata; Primates; Catarrhini; Hominidae
                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                 Score 4268;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4268
                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ď
                                                                                                                                                                                                                                                                                                                                                      1077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA
                                                                                                                                                                                                                                                                                                                                                      r
                                                                                                                                                                                                                                                                                                                           DB
                                                                                                                                                                                                                                                                                                                                                                                                                                          Ebner, R.,
                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                          6
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                         screening
                                                                                                                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                           Endress, G
                                                                                                                                                                                                                                                                                                                                                                                                                         using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT
                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    09-JAN-2002
                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                         signature
                                                                                                                                                                                                                                                      : 120
                                                                                                                                                                                                  180
                                                                                                                                                                                                                                     120
                                    480
                                                                        420
                                                                                                          360
                                                                                                                                             300
                                                                                                                                                               240
                                                                                                                                                                                240
                                                                                                                                                                                                                                                                        60
                                                                                                                                                                                                                                                                                         60
                    480
                                                      420
                                                                                          360
                                                                                                                             300
                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           망
                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                  ş
                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                         Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Вp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                밁
                                                                               Š
                                                                                                                 δÃ
                                                                                                                                      밁
                                                                                                                                                      S
                                                                                                                                                                        밁
                                                                                                                                                                                         Ş
                                                                                                                                                                                                           ₽
           õ
                                          Š
                                                               밁
                                                                                                  밁
                              밁
                                                                                                                                                                                                                                              1141
                                                                                                                                                                                                                                                                                                                    1021
                                                                                                                                      1321
                                                                                                                                                        1321
                                                                                                                                                                         1261
                                                                                                                                                                                                                            1201
                                                                                                                                                                                                                                                                                 1081
                                                                                                                                                                                                                                                                                                 1081
                                                                                                                                                                                                                                                                                                                                     1021
                                                               1441
                                                                                                                                                                                                            1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                      961
                                                                                                                                                                                                                                                                                                                                                                        961
                                                                                                                                                                                                                                                                                                                                                                                         106
                                                                                                                                                                                                                                                                                                                                                                                                         106
                                                                                                                                                                                                                                                                                                                                                                                                                          841
                                                                                                                                                                                                                                                                                                                                                                                                                                           841
                                                                                                                                                                                                                                                                                                                                                                                                                                                             781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGTAGGACTGTAGACAGTGAAACTTGGTACTTCATGGTGAATGTCACAGATGCCATCTCA
                                                                                                                                                                                                          AAGGTTCTCAAGGCCGCCGGTGTTAACACCACGGACAAAGAGATTGAGGTTCTCTATATT 1260
                                                                                                                                                                                                                                             GAGCGATCGCCTCACCGGCCCATCCTCCAAGCCGGACTGCCGGCAAATGCCTCCACAGTG
                                                                                                                                                                                                                                                                                                                                                    ACCTGTGTGGTGGAGAATGAATACGGGTCCATCAATCACACGTACCACCTGGATGTTGTG
                                                                                                                                                                                                                                                                                                                                                                                       CGAAACCAGCACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCTGACAAGGGAAATTAT
                                                                                                                                                                                                                                                                                                                                                                                                                         CGGTGGCTGAAAAACGGGAAGGAGTTTAAGCAGGAGCATCGCATTGGAGGCTACAAGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCTGCGGCCAACACTGTCAAGTTTCGCTGCCCAGCCGGGGGGAACCCAATGCCAACCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCCGGAGATGATGAGGATGACACCGATGGTGCGGAAGATTTTGTCAGTGAGAACAGTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCCGGAGATGATGAGGATGACACCGATGGTGCGGAAGATTTTGTCAGTGAGAACAGTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCTGCGGCCAACACTGTCAAGTTTCGCTGCCCAGCCGGGGGGAACCCAATGCCAACCATG
                                                               ATATCCTTTCACTCTGCATGGTTGACAGTTCTGCCAGCGCCTGGAAGAGAAAAGGAGATT
                                                                                                                                                                         CGGAATGTAACTTTTGAGGACGCTGGGGAATATACGTGCTTGGCCGGGTAATTCTATTGGG
                                                                                                                                                                                   ©GGAATGTAACTTTTGAGGACGCTGGGGAATATACGTGCTTGGGGGTAATTCTATTGGG
                                                                                                                                                                                                                                                                                                                    GAGCGATCGCCTCACCGGCCCATCCTCCAAGCCGGACTGCCGGCAAATGCCTCCACAGTG
 GTTTCGGCTGAGTCCAGCTCCCATGAACTCCAACACCCCGCTGGTGAGGATAACAACA
                                     AGCAGCCAGCCGGCTGTGCACAAGCTGACCAAACGTATCCCCCCTGCGGAGACAGGTAACA
                                                                                                                                      ATATCCTTTCACTCTGCATGGTTGACAGTTCTGCCAGCGCCTGGAAGAGAAAAGGAGATT
                             660
                                                                                                                                                                                                                                                                                                                                       1080
                                                                                                                                                                                                                                                                                                                                                                          1020
                                                                                                                                                                                                                                                                                                                      1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           600
                                                                                   1500
                                                                                                     1440
                                                                                                                      1440
                                                                                                                                        1380
                                                                                                                                                        1380
                                                                                                                                                                                                                                                1200
                                                                                                                                                                                                                                                                 1200
                                                                                                                                                                                                                                                                                                                                                                                           960
                                                                                                                                                                                                                                                                                                                                                                                                           960
                                                                                                                                                                                                                                                                                                                                                                                                                             900
                                                                                                                                                                                                                                                                                                                                                                                                                                              900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              540
                                                 1560
                                                                 1500
                                                                                                                                                                           1320
                               1560
```

ş

Ş

|--|

94 OA DP OA DP

0 y 0 y

da Qy

0y 0y

g 49

DP QV

B 63 B

0y 0y 0y 0b 0b 0b 0b 0b

당 상 당

20

180

180

```
DEFINITION
ACCESSION ·
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                      RESULT 3
AX336422
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       유
양
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9
                                                                                                                                                                                                                                                 SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                           BASE COUNT
ORIGIN
                                                                                                                                                                                                             REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                    д
                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                        음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
gg Qg
                                  В
                                                   õ
                                                                                                                                                         FEATURES
                                                                       Query Match
Best Local Similarity
Matches 4268; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3841
                                                                                                                                                                                                                                                                                                                                                    4261
                                                                                                                                                                                                                                                                                                                                                                                                                                            4141
                                                                                                                                                                                                                                                                                                                                                                                                                                                             4081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3961
61
               61
                                    μ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAACACCCACTCACTTTGCAATAGCCGTGCAAGATGAATGCAGATTACACTGATCTTATG
                                                                                                                                                                                                                                                                                                                                                                                      TTAAGGGATTGCTTTCATCTAATTCTGGCAGGACCTCACCAAAAAGATCCAGCCTCATACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTAAGGGATTGCTTTCATCTAATTCTGGCAGGACCTCACCAAAAGATCCAGCCTCATACC
         TCCATCCCGACCCACGCGGGGCGCGGGGGACACACAGGTCGCGGAGGAGGGTTGCCATTC
                                             CCCAAGGACCACTCTTCTGCGTTTGGAGTTGCTCCCCACAACCCCGGGCTCGTTGCTTTC
                                                                                                                                                                                                                                                                                                                                                    AAAAAAA
                                                                                                                                                                                                                                                                                                                                                                      AAAAAAAA 4268
                                                                                                                                                                                                                                                                                                                                                                                                                                             TGTTACAAAATTGGAGAAAGTATTTAATAAAAACCTGTTAATTTTTATACTGACAATAAAA
TCCATCCCGACCCACGCGGGGGGGGGGGACAACACAGGTCGCGGAGGAGCGTTGCCATTC
                                    CCCAAGGACCACTCTTCTGCGTTTGGAGTTGCTCCCCACAACCCCGGGCTCGTCGCTTTC
                                                                                                                                                                                                                                                                           Sequence
AX336422
AX336422.
                                                                                                                                                                 gene sets
Patent: W
Avalon Phi
                                                                                                                                                                                           Horrigan, S., Soppet, D.R. and Cancer gene determination and
                                                                                                                                                                                                                                Homo saplens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; E
Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                       AX336422
                                                                                                                                                                                                              Young
                                                                                                                     1199
                                                                       100.0%; ilarity 100.0%; Conservative 0
                                                                                                                                                                                                             , P.E., Augustus, M.,
                                                                                                                                                      : WO 0194629-A 6931 13-DEC-2001;
Pharmaceuticals (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                    4268
                                                                                                                      œ
                                                                                                                                                                                                                                                                             ï
                                                                                                                                                                                                                                                                                               6931
                                                                                                                    /organism="Homo sapiens"
/db_xref="taxon:9606"
964 c 1028 g 107
                                                                                                                                               .4268
                                                                                                                                                                                                                                                                             GI:18127141
                                                                                                                                                                                                                                                                                               from Patent
                                                                         0
                                                                               Score 4268;
Pred. No. 0;
                                                                                                                                                                                                                                                                                               4268 bp 1
1t W00194629
                                                                                                                                                                                                              Carter, K.C.,
                                                                         Mismatches
                                                                                                                                                                                             and
                                                                                                                                                                                                       Weaver, Z.
                                                                                                                      1077
                                                                                                                                                                                             therapeutic
                                                                                                                      c
                                                                                                                                                                                                                                                                                                        DNA
                                                                                           DB
                                                                                                                                                                                                              Ebner, R.,
                                                                                          6
                                                                         0
                                                                                                                                                                                             screening
                                                                         Indels
                                                                                          Length
                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                               Endress, G
                                                                                                                                                                                                                                          Euteleostomi;
                                                                                                                                                                                             using
                                                                                                                                                                                                                                                                                                         PAT
                                                                                                                                                                                                                                  Homo.
                                                                         0
                                                                                                                                                                                                                                                                                                         09-JAN-2002
                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3840
                                                                                                                                                                                             signature
                                                                                                                                                                                                                                                                                                                                                                                                                                              4200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4080
                    120
                                     60
                                                      60
                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Вp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                                       B
                                                                                                                                                                                                                                                                                                                         Š
                                                                                                                                                                                                                                                                                                                                             ₽
                                                                                                                                                                                                                                                                                                                                                         ρy
                                                                                                                                                                                                                                                                                                                                                                               ₽
                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                             В
                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                               δõ
                                                                                                                                                                                                                                                                     밁
                         οy
                                                              δÃ
                                                                                  밁
                                                                                                  õ
                                                                                                                      밁
                                                                                                                                    γQ
                                                                                                                                                          밁
           망
                                              망
                                               1081
                                                                                  1021
                                                                                                                                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                     1021
                                                                                                                      961
                                                                                                                                        961
                                                                                                                                                          901
                                                                                                                                                                            901
                                                                                                                                                                                              841
                                                                                                                                                                                                               841
                                                                                                                                                                                                                                  781
                                                                                                                                                                                                                                                   781
                                                                                                                                                                                                                                                                     721
                                                                                                                                                                                                                                                                                       721
                                                                                                                                                                                                                                                                                                         661
                                                                                                                                                                                                                                                                                                                          661
                                                                                                                                                                                                                                                                                                                                             601
                                                                                                                                                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGTGACTGCAGCAGCAGCGGCAGCGCCTCGGTTCCTGAGCCCACCGCAGGCTGAAGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTGGTCGTCGTCACCATGGCAACCTTGTCCCTGGCCCGGCCCTCCTTCAGTTTAGTTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTGCGCGTAGTCCATGCCCGTAGAGGAAGTGTGCAGATGGGATTAACGTCCACATGGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GATACCACATTAGAGCCAGAAGAGCCACCAACCAAATACCAAATCTCTCAACCAGAAGTG
                                                                                                                                                          CGAAACCACCACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCTGACAAGGGAAATTAT
                                                                                                                                                                                             CGGTGGCTGAAAAACGGGAAGGAGTTTAAGCAGGAGCATCGCATTGGAGGCTACAAGGTA
                                                                                                                                                                                                                                 CCTGCGGCCAACACTGTCAAGTTTCGCTGCCCAGCCGGGGGGAACCCAATGCCAACCATG
                                                                                                                                                                                                                                                                                                                                            AGTAGGACTGTAGACAGTGAAACTTGGTACTTCATGGTGAATGTCACAGATGCCATCTCA
                                                                                                                                                                                                                                                                                                                                                                               ATCAGTTGGACTAAGGATGGGGTGCACTTGGGGCCCAACAATAGGACAGTGCTTATTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                     TACGTGGCTGCGCCAGGGGAGTCGCTAGAGGTGCGCTGTTGAAAGATGCCGCCGTG
          ACCTGTGTGGTGGAGAATGAATACGGGTCCATCAATCACACGTACCACCTGGATGTTGTG 1020
                                                                                                                                                                                                                                                                               AACAAGAGAGACCATACTGGACCAACACAGAAAAGATGGAAAAGCGGCTCCATGCTG
                                                                                                                                                                                                                                                                                                                   TCCGGAGATGATGAGGATGACACCGATGGTGCGGAAGATTTTGTCAGTGAGAACAGTAAC
                                                       GTCGGAGGAGACGTAGAGTTTGTCTGCAAGGTTTACAGTGATGCCCAGCCCCACATCCAG
                                                                                            GAGCGATCGCCTCACCGGCCCATCCTCCAAGCCGGACTGCCGGCAAATGCCTCCACAGTG 1080
                                                                                                                                                                                                                                                                      AACAAGAGGAGCACCATACTGGACCAACACAGAAAAGATGGAAAAAGCGGCTCCATGCTGTG
                                                                                                                                                                                                                                                                                                          TCCGGAGATGATGAGGATGACACCGATGGTGCGGAAGATTTTGTCAGTGAGAACAGTAAC
                                                                                   GAGCGATCGCCTCACCGGCCCATCCTCCAAGCCGGACTGCCGGCAAATGCCTCCACAGTG
                                               GTCGGAGGAGACGTAGAGTTTGTCTGCAAGGTTTACAGTGATGCCCCAGCCCCACATCCAG
```

1200 1140

1200

1080

900

960 960 900 840

840

780

780

720 660 660 600 600 540 540 480 480 420 420 360 360 300 300 240

CTGGCCAGAGGCATGGAGTACTTGGCTTCCCAAAATGTATTCATCGAGATTTAGCAGCC 2160		180 186 186 192	61 GTTTCGGCTGAGTCCAGCTCCATGAACTCCAACACCCCGCTGGTGAGAACAACA 21 CGCCTCTCTTCAACGGCAGACACCCCCATGCTGCAACAGCCAGGGTGAGAACAACA 21 CGCCTCTCTTCAACGGCAGACACCCCCATGCTGGCAGGGGTCTCCGAGTATGAACTTCCA 1680 21 CGCCTCTCTTCAACGGCAGACACCCCCATGCTGGCAGGGGTCTCCGAGTATGAACTTCCA 1680 21 CGCCTCTCTTCAACGGCAGACCACCCCCATGCTGGCAGGGGTCTCCGAGTATGAACTTCCA 1680 81 GAGGACCCAAAATGGGAGTTTCCAAGAGATAAGCTGACACTGGGCAAGCCCCTGGGAGAA 1740 81 GAGGACCCAAAATGGGAGTTTCCAAGAGATAAGCTGACACTGGGCAAGGCCCCTGGGAGAA 1740 81 GAGGACCCAAAATGGGAGTTTCCAAGAGATAAGCTGACACTGGGCAAGGCCCCTGGGAGAA 1740 41 GGTTTCCTTTGGGCAAGTGGTCATGGCGGAAAGCACAGGCCCAAGAGACAAGCCCAAG 1800		01 AAGGTTCTCAAGGCCGCGGTGTTAACACCACCACGGACAAAGAGATTGAGGTTCTCTATATT 1260
OY 3161 INTITUTE ANTIGATIVE ANTIGCACCTAGAAATTGCACCTAGAAATTGCTCTCTTT 3240 Db 3181 TATTTTTGTATTGCTATTGAATGGATGTCCCAATGCACCTAGAAAATTGGTCTCTCTTT 3240 QY 3241 TTTTAATAGCTATTTGCTAAATGCTGTTCTTACACCAATAATTTCTTAATTTCCACCGAGCA 3300	3001 GCTGTGGACCAGTAGGACTCAAGGTGGACGTGCGTTCTGCCTTGCTTAATTTTGTAA 3061 TAATTTGGAGAAGATTTATGTCAGCACACACTTACAGAGCACAAATGCAGTAGGACGTGC [Db 2821 TTGTTGTCCACTTGTATATATGGATCAGAGAGTAAATTATATGGAAGAAGTAAATTAGAAAAGTAATTAGAAA 2880 Qy 2881 TATGTGTAAAGATTTATACAGTTGAAAACTTGTAATCTTCCCCAGGAGAAAGAA	2701 2701 2701 2761 2761 2761 2821	QY 2521 TTCAAGCAGTTGGTAGAAGACTTGGATCGAATTCTCACTCTCACAACCAATGAGGAATAC 2580	Db 2281 ATGCCTCCAGAAGCCCTGTTTGATAGAGTATACACTCATCAGAGTATGATGATGATGATGATGATGATGATGATGATGAT

δÃ

1921

밁 Ş 밁

1861 1861 1801

₽

2041 1981 1981 1921 δÃ

1801 1741

밁 Ş 밁 Š 밁 γQ

1681

1681

1741

1621

1621 1561 1561 1501 1501 1441 1441 1381

δõ ₽

뭐 Ş 밁 밁 Ş

> 1381 1321

Ş

Ş

1321

밁 Ş 밁 δõ

1261 1261 1201

1201

밁

Š 밁 õ 밁 80 В Ş 밁 Ş В Ş

2281 2221 2221 2161 2161 2101 2101 2041

```
RESULT 4
HUMKSAMI
LOCUS
DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                     망
                                                                                                                                                                                                                                                                                                                                                                                                                                  ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Вb
        KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                           Ъ
                                                                                                                                                                         δ
                                                                                                                                                                                                        δô
                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                        ş
                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                        Š
                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                     õ
                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                    ş
                                                                                                                                                                                                                                                                                                                                                                                                  Q
                                                                                                              Ş
                                                                                                                              망
                                                                                                                                          Ş
                                                                                                                                                                                            밁
                                                                                                밁
                                                                                                                                                                                                                                                                                                                          3841
                                                                                                                                                                                                                                                                                                                                                                       3781
                                                                                                                                                                                                                                                                                                                                                                                       3721
                                                                                                                                                                                                                                                                                                                                                                                                       3721
                                                                                                                                                                                                                                                                                                                                                                                                                      3661
                                                                                                                                                                                                                                                                                                                                                                                                                                      3661
                                                                                                                                                                                                                                                                                                                                                                                                                                                      3601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3361
                                                                                                4261
                                                                                                                4261
                                                                                                                              4201
                                                                                                                                              4201
                                                                                                                                                              4141
                                                                                                                                                                            4141
                                                                                                                                                                                             4081
                                                                                                                                                                                                            4081
                                                                                                                                                                                                                            4021
                                                                                                                                                                                                                                           4021
                                                                                                                                                                                                                                                           3961
                                                                                                                                                                                                                                                                           3961
                                                                                                                                                                                                                                                                                           3901
                                                                                                                                                                                                                                                                                                          3901
                                                                                                                                                                                                                                                                                                                                        3841
                                                                                                                                                                                                                                                                                                                                                        3781
                                                                                                                                                                                                                                                                                                                                                                                                                     TTTGAAAAGAGAATATTTACAATATATGACTAATTTGGGGAAAATGAAGTTTTGATTTAT
                                                                                                                                                            GCTGGCCTTCTGCTTCTGAGTTGCACATTAATCAGATTAGCCTGATTCTCTTCAGTGAAT 3840
                                                                                                                                                                                                                                                                                                                                                                                      AAGAACTCATTCATAGGAAGGTGTTTCATTTTGGTGTGCAACCCTGTCATTACGTCAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAGAACTCATTCATAGGAAGGTGTTTCATTTTGGTGTGCAACCCTGTCATTACGTCAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATGCAGGCAGCAGACAGAGATTAATCTATTGCTTGGACTTAACTAGTTATCAGATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAAAAAA 4268
                                                                                                                              AAACACCCACTTAGCAATAGCCGTGCAAGATGAATGCAGATTACACTGATCTTATG 4140
                                                                                                                                                                                                                                    TACATCAGACAAAATATCGCCGTTGTTCTCTGTACTAAAGTATTGTGTTTTGCTTTTGG 4080
                                                                                                                                                                                                                                                                   TTAAGGGATTGCTTTCATCTAATTCTGGCAGGACCTCACCAAAAGATCCACCCTCATACC
                                                                                                                                                                                                                                                                                                                                                       TTGTGTTTAAATGCTGCTGTCAGACGATTGTTCTTAGACCTCCTAAATGCCCCCATATTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTTGAAAAGAGAATATTTACAATATATGACTAATTTGGGGGAAAATGAAGTTTTGATTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATGCAGGCAGCAGCAGACTAGTTAATCTATTGCTTGGACTTAACTAGTTATCAGATCC
                                                                                                AAAAAAA
                                                                                                                                                                                             AAACACCCACTCACTTTGCAATAGCCGTGCAAGATGAATGCAGATTACACTGATCTTATG
                                                                                                                                                                                                                            TACATCAGACAAAATATCGCCGTTGTTCCTTCTGTACTAAAGTATTGTGTTTTGCTTTGG
                                                                                                                                                                                                                                                           TTAAGGGATTGCTTTCATCTAATTCTGGCAGGACCTCACCAAAAGATCCAGCCTCATACC
                        Human fibroblast (
M87770
M87770.1 GI:1867
K-sam~I; fibroblas
        M87770.1 GI:186779
K-sam-I; fibroblast growth
Homo sapiens brain cDNA to
Homo sapiens
Eukaryota; Metazoa;
                                                        HUMKSAMI
                                                                                                4268
                                               4268 bp
growth factor i
Chordata; Craniata;
                 factor.
                                                p mRNA
receptor
 Vertebrata;
                                                (K-sam)
                                                         linear
                                                 mRNA,
 Euteleostomi;
                                                PRI 06-JAN-1995
A, complete cds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      3660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3420
                                                                                                                                                                                                                                                                           4020
                                                                                                                                                                                                                                                                                           3960
                                                                                                                                                                                                                                                                                                          3960
                                                                                                                                                                                                                                                                                                                                                        3840
                                                                                                                                              4260
                                                                                                                                                                                             4140
                                                                                                                                                                                                                            4080
                                                                                                                                                                                                                                                           4020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
MEDLINE
PUBMED
FEATURES
                                                                                                              Š
                                                                                                                              Вþ
                                                                                                                                          δ
  멍
           δ
                                 멍
                                             ργ
                                                                밁
                                                                              Ş
                                                                                                9
                                                                                                                                                             g
                                                                                                                                                                          οy
                                                                                                                                                                                            밁
                                                                                                                                                                                                        Q
                                                                                                                                                                                                                                                           BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                       CDS
                                                                                                                                                                                                                                                                                  sig_peptide
  361
                 361
                                 301
                                                301
                                                                241
                                                                                241
                                                                                                181
                                                                                                                181
                                                                                                                                121
                                                                                                                                              121
                                                                                                                                                              61
                                                                                                                                                                             61
                                                                                                                                                                                                                                                                    1199
```

```
Ouery Match
Best Local Similarity
Matches 4268; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGGTCGTGGTCACCATGGCAACCTTGTCCCTGGCCCGGCCCTCCTTCAGTTTAGTTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                            TATGGAAGAGGACCGGGGATTGGTACCGTAACCATGGTCAGCTGGGGTCGTTTCATCTGC
                                                                                                                                                                                                                                                                                TTGCGCGTAGTCCATGCCCGTAGAGGAAGTGTGCAGATGGGATTAACGTCCACATGGAGA
                                                                                                                                                                                                                                                                                                                                                                AAGTGACTGCAGCAGCAGCGGCAGCGCCTCGGTTCCTGAGCCCCACCGCAGGCTGAAGGCA
                                          GATACCACATTAGAGCCAGAAGAGCCAACCAAATACCAAATCTCTCAACCAGAAGTG 420
                                                                                                                                                                      TATGGAAGAGGACCGGGGTTGGTACCGTAACCATGGTCAGCTGGGGTCGTTTCATCTGC
                                                                                                                                                                                                                                                          TTGCGCGTAGTCCATGCCCGTAGAGGAAGTGTGCAGATGGGATTAACGTCCACATGGAGA
                                                                                                                                                                                                                                                                                                                                            AAGTGACTGCAGCAGCAGCGCCAGCGCTCGGTTCCTGAGCCCACCGCAGGCTGAAGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Proc. Nat 92212948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mammalia;
1 (bases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 (bases 1 to 4268)
Katoh,M., Hattori,Y., Sasaki,H.,
Sugimura,T. and Terada,M.
K.sam gene encodes secreted as we
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            tyrosine kinase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /Godon_start=1
//Godon_start=1
//product="fibroblast growth factor receptor"
//db_xref="gi:186780"
//translation="MVSWGRFICL/VVVTMATLSLARPSFSLVEDTTLEPEEPTKYQI
//db_xref="gi:186780"
//translation="MVSWGRFICL/VVVTMATLSLARPSFSLVEDTVLGEYSUNKRAPYWTNTE
SOPEVYVAAPGESIEVRCLTADAVISWTDAVISWTDGAEDFVSENSNNKRAPYWTNTE
KAEKRLHAVPAANTVKFRCPAGCNPMPTWRHEVLKGKEFKOCHR IGGYKVRNGHWSLIM
ESVVPSDKGNYTCVVENEYSGINHTYHLDVVERSPHRPILDAGLPAANSTVYGGOVEF
VCKYYSDAQPHIQWIKHTEKNGSKYGPDGLPYLKVLKAAGVNTTDKEIEVLYIRNVTF
EDAGEYTCLAGNSIGISSHSAWLTVLPAPGREKEITASPDYLEIAIYCIGVFLTACMV
VTVILCRMKNTTKKPDPSSQPAVHKLTKRIPLRRQVTVSAESSSSMUSWTPLVRITTR
LSSTADTMLAGVSEYELPEDPKWEFPRDKLTLCKPLGEGCFGQVVMAEAVGIDKDKP
KESVTVAVKMLKDDATEKDLSDLVSEMEMMKMIGKHKNIINLGLGACTQOCPLYVIVEY
ASKGNITEXPLARRPOMEYSYDINKVEEDMFFILVSCTYQLARGMEYLASQKCIH
RDLAARNVLVTENNYMKIADFGLARDINIDYYKKTTNGRLPVKMMAPEALFDRVYTH
QSDVWSFGVLMWEIFTLGGSPYEGIPKLLKEGHRUKPAAKGTURELYMMMROCW
HAVPSQRPTFKQLVEDLDRILTITNEEVLDLSQFPLEQYSPSYPDTRSSCSSGDDSVF
SPDMPYEPCLIPOYPHINGSVKT"

//gene="K-samit"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Natl. Acad. Sci.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /gene="K-sam-I"
964 c 1028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /gene="K-sam-I"
274. .2739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eutheria;
1 to 4268)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /gene="K-sam-I"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tissue_type="brain"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .4268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Primates; Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 4268;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         well
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (7),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tanaka, M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2960-2964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sugano, K., Yazaki, Y.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (1992)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4268;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                              360
                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                              180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60
    420
                                                                                        360
                                                                                                                                                                          300
                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
```

1441 TGTATGGTGGTAACAGTCATCCTGTGCCGAATGAAGAACACGACCAAGAAGACCAGACTTC 1500	Db 45
.381 ACAGCTTCCCCAGACTACCTGGAGATAGCCATTTACTGCATAC	B 54
321 ATATCCTTTCACTCTC	р Оу
261	Db Qy
1201 AAGGTTCTCAAGGCCGCCGGTGTTAACACCACGGACAAAGAGATTGAGGTTCTCTATATT	Ф
141 TGGATCAAGO	рь
081 GTCGGAGGAGACGTAGAGTTTGTCTGC: 	9 QV
021 GAGCGATCGCCTCACCGCCCCATCCTCCA	ρ _γ
961 ACCTGTGTGGTGGAGAATGAA	p 64
01 CGAAACCACTGGAGCCTCATTATGG	р _О у
41	. DP OA
B1 CCTGCGGCCAACACTGTCAAGTT	д ду Оу
21 AACAAGAGAGCACCATAC	90
	B 6
OI AGTAGGACTGTAGACAGTGAAACTTGCTACTTCATGGTC OI AGTAGGACTGTAGACAGTGAAACTTGGTACTTCATGGTC OI AGTAGGACTGTAGACAGTGAAACTTGGTACTTCATGGTC	B 2
41 GAGTACTTGCAGATAAAGGGCGCCACGCCTAGAC	, B &
81 ATCAGTTGGAC	B 5
21 TACGTGGCTGCGCCA	B 3

2640	TTGGACCTCAGCCAACCTCTCGAACAGTATTCACCTAGTTACCCTGACACAAGAAGTTCT 2	2581	Qy
2580	TCAAGCAGTTGG	521	рь
2580	TGGTAGAAGACTTGGATCGAATTCTCACTCTCACAACCAATGAGGAATA	21	Qy
2520 2520	ANCOMACTOTACATGATGAGGGACTGTTGGCATGCAGTGCCCTCCAGAGACCAACG 2	61	рь 23
46	GAACTTTTTAAGCTGCTGAAGGAAGGACACAGAATGGATAAGCCAGCC	461	Ov D
2460	GAGGAACTTTTTAAGCTGCTGAAGGAAGGACACAGAATGGATAAGCCAGCC	2401	, Qy
40	GGGTGTTAATGTGGGAGATCTTCACTTTAGGGGGCTCGCCCTACCCAGGGATTCCCGTG	2341	Db
2400	GGGTGTTAATGTGGGAGATCTTCACTTTAGGGGGGCTCGCCCTACCCAGGGATTCCCCGTG	w	Оу
34	ATGCCTCCAGAAGCCCTGTTTGATAGAGTATACACTCATCAGAGTGATGTCTGGTCCTTC	2281	DЬ
2340	GGCTCCAGAAGCCCTGTTTGATAGAGTATACACTCATCAGAGTGATGTCTGGTCCTTC	N	Qy
28	GATATCAACAATATAGACTATTACAAAAAGACCACCAATGGGCGGCTTCCAGTCAAGTGG	2221	Db
	ATATCAACAATATAGACTATTACAAAAAGACCACCAATGGGCGGCTTCCAGTCAAGTGG	N	Qy
22	AGAAATGTTTTGGTAACAGAAACAATGTGATGAAAATAGCAGACTTTGGACTCGCCAGA	2161	Db
	AAATGTTTTGGTAACAGAAAACAATGTGATGAAAAATAGCAGACTTTGGACTCGCCAGA	_	Qy
16	CTGGCCAGAGGCATGGAGTACTTGGCTTCCCAAAAATGTATTCATCGAGATTTAGCAGCC		DЬ
<u> </u>	TGGCCAGAGGCATGGAGTACTTGGCTTCCCAAAAATGTATTCATCGAGATTTAGCAGCC	-	Qy
10	ATTAACCGTGTTCCTGAGGAGCAGATGACCTTCAAGGACTTGGTGTCATGCACCTACCAG	2041	Db
10	AACCGTGTTCCTGAGGAGCAGATGACCTTCAAGGACTTGGTGTCATGCACCTACCAG	0	Qy
04	GCAACCTCCGAGAATACCTCCGAGCCCGGAGGCCACCCGGGATGGAGTACTCCTATGAC	9	dq
2	GCAACCTCCGAGAATACCTCCGAGCCCGGGAGGCCACCCGGGATGGAGTACTCCTATGAC	9	Qy
oo o		9	дb
98	TCTTGGAGCCTGCACACAGGATGGGCCTCTCTATGTCATAGTTGAGTATGCCTCTAAA	9	Qy
	GATCTGGTGTCAGAGATGGAGATGATGATGATGATTGGGAAACACACAAGAATATCATAAAT	1861	Db
92	ATCTGGTGTCAGAGATGGAGATGATGAAGATGATTGGGAAACACAAGAATATCATAAAT	8	Qy
1860			Db
9 6		1801	ογ
8 6		1741	Db
•	GTTGCTTTGGGCAAGTGGTCATGGCGGAAGCAGTGGGAATTGACAAAGACAAGCCCA	1741	Qγ
7.4		1681	Db
4	AGGACCCAAAATGGGAGTTTCCAAGAGATAAGCTGACACTGGGCAAGCCCCTGGGAC	6	Qy
8	CGCCTCTCTCAACGGCAGACACCCCCATGCTGGCAGGGGTCTCCGAGTATGAACTTCCA	σ	DЪ
œ	GCCTCTCTTCAACGGCAGACACCCCCATGCTGGCAGGGGTCTCCGAGTATGAACTTCC	1621	Qy
Ň	GTTTCGGCTGAGTCCAGCTCCTCCATGAACTCCAACACCCCGCTGGTGAGGATAACAACA	'n	da
N .	TTTCGGCTGAGTCCAGCTCCTCCATGAACTCCAACACCCCGCTGGTGAGGATAACAAC	1561	Оу
56			DЬ
1560	GCAGCCAGCCGGCTGTGCACAAGCTGACCAAACGTATCCCCCTGCGGAGACAGGTAAC		Qy

3720	1 CAACGTCTAACTGGACTTCCCCAAGATAAATGGTACCAGCGTCCTCTT	Оу 366
3660 3660	1 AAGAACTCATTCATAGGAAGGTGTTTCATTTTGGTGTGCAACCCTGTCATI	у 36 b 36
3600	1 TYGTGTTTAAATGCTGCTGTGAGACGATTGTTCTTAGACCTCCTAAA	- '
3540 3540	1 TTTGANAAGAGAATATTTACAATATATGACTAATTTGGGGAAAATGAAGTTTTGATTT	ພູພ
3480 3480	1 ATGCAGGCAGCACAGCAGACTAGTTAATCTATTGCTTGGACTTAA	34
3420 3420	1 TGGTAATATACAAAACAATTAATCATTTATAGTTTTTTTT	u u
3360 3360	1 GAGGTGGAAAAATACTTTTGCTTTCAGGGAAAATĞGTATAACGTTA 	ω ω ω ω
3300 3300	TTGCTAAATGCTGTTCTTA TGCTAAATGCTGTTCTTA	Qy 324 Db 324
3240 3240	TTGATTI	31 31
3180 3180	GGATGTATGTAAATA GGATGTATGTAAATA	ω w
3120 3120	GATTTATGTCAGCACACACT 	ພ ພ
3060	GGACTCAAGGTGGACGTGCGTTCTGCCTTCCTTGTTAATTTTGTAA 	300
3000	TGCCACAAGCCACCATGTAACCCCTCTCACCTGCCGTGCGTTCTG	94
2940 2940	ATGTGTAAAGATTTATACAGTTGAAAACTTGTAATCTTCCCCAGGAGGAGGAGAAGATGTT 	288 288
2880 2880	ATGGATCAGAGGAGTAAATAATTGGAAAAGTAATCAGCA 	282 282
2820 2820	ACTGGGAACCTAGCTACACTGAGCAGGGAGACCATGCCTCCCAGAGC	
2760 2760	CACATAAACGGCAGTGTTAAAACATGAATGACTGTGTCTGCCTGTCCC 	270 270
2700 2700	TGTTCTTCAGGAGATGATTCTGTTTTTTCTCCAGACCCATGCCTTACGAACCATGCCTT	Qy 2641 Db 2641
2640		Db 2581

```
Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 рь
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Вþ
                                                                                                                                                                                                                                     SOURCE
ORGANISM
                                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                    RESULT 5
                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Вp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                     밁
                                    FEATURES
                                                                                                                                     REFERENCE
                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                          rocus
                                                            JOURNAL MEDLINE
                                                                                                                                                                          AUTHORS
TITLE
                                                                                                 TITLE
                                                                                                                         AUTHORS
                                                                                                                                                           JOURNAL
                                                  PUBMED
                                                                                                                                                                                                                                                                                                                                                                                     4261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3781
                                                                                                                                                                                                                                                                                                                                                                                                            4261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3661 CAACGTCTAACTGGACTTCCCAAGATAAATGGTACCAGCGTCCTCTTAAAAGATGCCTTA 3720
                                                                                                                                                                                                                                                                                                                                                                                                                                                             4201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTTGATAATGGCTTCCAGACTCTTTGCGTTGGAGACGCCTGTTAGGATCTTCAAGTCCCA 3900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTAAGGGATTGCTTTCATCTAATTCTGGCAGGACCTCACCAAAAGATCCCAGCCTCATACC 4020
                                                                                                                                                                                                                                                                                                                                                                                     AAAAAAAA 4268
                                                                                                                                                                                                                                                                                                                                                                                                                                   TCATAGAAAATTGAAACACAGAGTTGTTCTGCTGATAGTTTTGGGGGATACGTCCATCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCATAGAAAATTGAAACACAGAGTTGTTCTGCTGATAGTTTTTGGGGATACGTCCATCTTT
                                                                                                                                                                                                                                                                                                                                                                                                            AAAAAAAA 4268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTAAGGGATTGCTTTCATCTAATTCTGGCAGGACCTCACCAAAAGATCCAGCCTCATACC
                                              Dionne,C.A.

Direct Submission

Direct Submission

Submitted (01-JUN-1990) Dionne C., Rorer Central Research, 680 submitted (01-JUN-1990) Dionne C., Rorer Central Research, 680 Allelande Road, King of Prussia, PA 19425, USA

2 (bases 1 to 3415)

Dionne,C.A., Crumley,G., Bellot,F., Kaplow,J.M., Searfoss,G., Ruta,M., Burgess,W.H., Jaye,M. and Schlessinger,J.

Cloning and expression of two distinct high-affinity receptors cross-reacting with acidic and basic fibroblast growth factors EMBO J. 9 (9), 2685-2692 (1990)

1697263
                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; 1 (bases 1 to 3415)
                                                                                                                                                                                                                                                            cell surface glycoprotein; fibroblast growth factor receptor; tyrosine kinase.
                                                                                                                                                                                                                                                                                    X52832
X52832.1 GI:31373
                                                                                                                                                                                                                                                                                                             HSFGFRBE 3415 bp mRNA HSFGFRBE 3415 bp mRNA
                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                   Homo sapiens.
                        Location/Qualifiers
1. .3415
/organism="Homo sapiens"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                               factor
                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                              receptor-BEK
                                                                                                                                                                                                                                                                                                                           PRI 23-MAR-1995
                                                                                                                                                                                                               Euteleostomi; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4080
```

/tissue_type="brainstem"

```
γ
                                                          В
                                                                            Ωy
                                                                                                     밁
                                                                                                                              Q
                                                                                                                                                               В
                                                                                                                                                                                 Q
                                                                                                                                                                                                             Ф
                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                        δÃ
        밁
                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                            QΥ
                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                   QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                       õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sig_peptide
mat_peptide
        539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CDS
                                                                                                             419
                                                                                                                                     513
                                                                                                                                                               359
                                                                                                                                                                                        453
                                                                                                                                                                                                                    299
                                                                                                                                                                                                                                           393
                                                                                                                                                                                                                                                                      239
                                                                                                                                                                                                                                                                                               333
                                                                                                                                                                                                                                                                                                                         179
                                                                                                                                                                                                                                                                                                                                                   273
                                                                                                                                                                                                                                                                                                                                                                              119
                                                                                                                                                                                                                                                                                                                                                                                                     213
                                                                                                                                                                                                                                                                                                                                                                                                                                                          153
                                                                                                                                                                                                                                                                                                                                                                                                                                 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   _
CATGGTGAATGTCACAGATGCCATCTCATCCGGAGATGATGAGGATGACACCGATGGTGC
                CATGGTGAATGTCACAGATGCCATCTCATCCGGAGATGATGAGGATGACACCGATGGTGC
                                                 AGACTCCGGCCTCTATGCTTGTACTGCCAGTAGGACTGTAGACAGTGAAACTTGGTACTT
                                                                                                     GCCCAACAATAGGACAGTGCTTATTGGGGAGTACTTGCAGATAAAGGGCGCCACGCCTAG
                                                                                                                                                       GGCCCGGCCCTCCTTCAGTTTAGTTGAGGATACCACATTAGAGCCAGAAGAGCCACCAAC 392
                                                                                                                                                                                                                                                                                                               GCAGATGGGATTAACGTCCACATGGAGATATGGAAGAGGACCGGGGATTGGTACCGTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                       CACAGGTCGCGGAGGAGCGTTGCCATTCAAGTGACTGCAGCAGCAGCAGCGGCAGCGCCTCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCCAGGTCGCGGAGGAGCGTTGCCATTCAAGTGACTGCAGCAGCAGCGGCACCG-CTCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /translation="Myswgrficlyvytmatlslarpsfslvedttlepeepptkyqi
SQPEVYVAAPGESLEVRCLLKDAAVISWTKDGYHLGPNETTVLTGEYLQIKGATPRDS
GLYACTASRTYUSETTWYEMVNYDAISGDDEDDTDGAEDFVSENSNNKRAPYWTYE
GLYACTASRTYUSETTWYEMVNYDAISGDDEDDTDGAEDFVSENSNNKRAPYWTYE
KMEKRLHAVPAANTVKFRCPAGGNPMPTMRWLKNGKEFKQEHRIGGYKVENGHMSLIM
ESVVBSDKGNYTCVVENEYGSIMHTYHLDVVERSPHRPILQAGLPANASTVVGGDVEF
VCKVYSDAQPHIQWIKHYEKNGSKYGPDGLPYLKVKAGVNTTDKEIEVLYIRNYF
EDAGEYTCLAGNSIGISFNSAMLTVLPAFGREKSITASPDYLEIAYICIGVFLIACMV
VTVILCHMKNTTKKPDDSSQPAVHKLTKRIPLARRQVTVGABSSSSMNSNTPLURITTR
LSSTADTPMLAGVSEYELPEDPKWEFPRDKLTLGKPLGEGCFGQVVMAERAGIDKORP
KEAVTVAVMLKDDATEKDLSDLVSEMEMKMIGKHKNIINLLGACTQOGPFVUYVEY
ASKGNLREYLARRPPGMEYSYDINRVPEEDMFKDLVSCTYQLARGMEYLASQKCIH
RDLAARNVLVTENNVMKIADFGLARDINNIDYKKTTNGRLPVKMAPEALFDRVYTH
QSDVWSFGVLMWEIFTLGGSPYEGIPVEELFKLLKEGHBUDK PANCTNELYMMEDCW
HAVPSQRPTFKQLVEDLDRILTTTNEEYLDLSQPLEQYSPSYPDTRSSCSSGDDSVF
SPDPMPYEPCLPQYPHINGSVKT"
180. 244
243. 2642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /product="mature
780 c 865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /db_xref="SWISS-PROT:P21802"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note="fibroblast growth factor receptor-BEK precursor"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /clone_lib="lambda gt11"
/dev_stage="neonatal (1 day)"
180. .2645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /protein_id="CAA37014.1"
/db_xref="GI:31374"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /codon_start=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 79
99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                . 8 %
# #
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  fibroblast
g 817 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3386.6;
No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             growth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DΒ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             receptor-BEK"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                          692
                                                                            632
                                                                                                                               572
                                                                                                                                                         418
598
                                                                                                        478
                                                                                                                                                                                                                                                                                                                                                                       178
                                                                                                                                                                                                                                                                                                                                                                                                272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2,
```

```
Qy
                 밁
                            δÃ
                                             B
                                                          Qγ
                                                                          밁
                                                                                     δÃ
                                                                                                      В
                                                                                                                  οy
                                                                                                                                              οy
                                                                                                                                                              B
                                                                                                                                                                         Qy
                                                                                                                                  밁
                                                                                                                                                                                          망
                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                   멍
                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                            ₽
                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                        망
                                                                                                                                                                                                                                                                                                                                                     οy
                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                              οy
                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ρy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ρy
                                                                          1499
                                                                                                                                  1379
                                                                                                                                                                                                                        1199
                                                                                                                                                               1319
                                                                                                                                                                            1413
                                                                                                                                                                                           1259
                                                                                                                                                                                                                                     1293
                                                                                                                                                                                                                                                    1139
                                                                                                                                                                                                                                                                 1233
                                                                                                                                                                                                                                                                                1079
                                                                                                                                                                                                                                                                                              1173
                                                                                                                                                                                                                                                                                                             1019
                                                                                                                                                                                                                                                                                                                          1113
                                                                                                                                                                                                                                                                                                                                                      1053
                                                                                                                                                                                                                                                                                                                                        959
                                                                                                                                                                                                                                                                                                                                                                     699
                                                                                                                                                                                                                                                                                                                                                                                  993
                                                                                                                                                                                                                                                                                                                                                                                                 839
                                                                                                                                                                                                                                                                                                                                                                                                               933
                                                                                                                                                                                                                                                                                                                                                                                                                             779
                                                                                                                                                                                                                                                                                                                                                                                                                                          873
                                                                                                                                                                                                                                                                                                                                                                                                                                                         719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      813
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                693
                                          GGCAGGGGTCTCCGAGTATGAACTTCCAGAGGACCCAAAATGGGAGTTTCCAAGAGATAA
                                                                             CAACACCCCGCTGGTGAGGATAACAACACGCCTCTCTTCAACGGCAGACACCCCCCATGCT
                                                                                                 ACGTATCCCCCTGCGGAGACAGGTAACAGTTTCGGCTGAGTCCAGCTCCTCCATGAACTC
                                                                                                                              AGTGGGAATTGACAAAGACAAGCCCAAGGAGGCGGTCACCGTGGCCGTGAAGATGTTGAA 1832
                     GCTGACACTGGGCAAGCCCCTGGGAGAAGGTTGCTTTGGGCAAGTGGTCATGGCGAAGC
                                                                       CAACACCCCGCTGGTGAGGATAACAACACGCCTCTCTTCAACGGCAGACACCCCCATGCT
                                                                                                                                                          ATACGGGCCCGACGGGCTGCCCTACCTCAAGGTTCTCAAGGCGCCGGCGGTGTTAACACCAC 1232
                                                                                                                                                                                                                                                                                                       TTACAGTGATGCCCAGCCCCACATCCAGTGGATCAAGCACGTGGAAAAGAACGGCAGTAA 1172
                                                                                                                                                                                                                                                                                                                                    CAATCACACGTACCACCTGGATGTTGTGGAGCGATCGCCCTCACCGGCCCATCCTCCAAGC
                                                                                                                                                                                                                                                                                                                                                                                            GGAAGATTTTGTCAGTGAGAACAGTAACAACAAGAGAGCACCATACTGGACCAACACAGA
                                                                                                                                                                                                                                                                                                                                                                 CAATCACACGTACCACCTGGATGTTGTGGAGCGATCGCCTCACCGGCCCATCCTCCAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGCCGGGGGGAACCCAATGCCAACCATGCGGTGGCTGAAAAACGGGAAGGAGTTTAAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAAGATGGAAAAGCGGCTCCATGCTGTGCCTGCGGCCAACACTGTCAAGTTTCGCTGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGAAGATTTTGTCAGTGAGAACAGTAACAACAAGAGAGCACCATACTGGACCAACACAGA
                                           1618
                                                         1712
                                                                                     1652
                                                                                                                1592
                                                                                                                                                                        1472
                                                                       1558
                                                                                                   1498
                                                                                                                                                                                                                                                                                                                                                                                1052
                                                                                                                                                                                                                                                                                                                                                                 958
                                                                                                                                                                                                                                                                                                                                                                                                            992
                                                                                                                                                                                                                                                                                                                                                                                               868
                                                                                                                                                                                                                                                                                                                                                                                                                          838
                                                                                                                                                                                                                                                                                                                                                                                                                                        932
                                                                                                                                                                                                                                                                                                                                                                                                                                                      778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            752
```

912	GAGTAAATAATTGGAAAAGTAATCAGCATATGTGTAAAGATTTATACAGTTGAAAACTTG 2	2853	Ş
758	GAGCAGGGAGACCATGCCTCCCAGAGCTTGTTGTCTCCACTTGTATATATGGATCAC	2699	Db
	CTCCCAGAGCTTGTTGTCTCCACTTGTATATATGGATCAGAG 2	2793	Qy
9 (TGTCTGCCTGTCCCCAAACAGGACAGCACTGGGAACCTAGCTACAC 2		B 5
ō	C. DE JEBUSTO PRODUCTO DE DE DE DE CONTRA DE DESTA DE DESTA DE LA CONTRA DEL CONTRA DE LA CONTRA DEL CONTRA DE LA CONTRA DEL CONTRA DEL CONTRA DE LA CONTRA DE LA CONTRA DEL CONTRA DE LA CONTRA DEL CONTR		? !
732 638	AGACCCCATGCCTTACGAACCATGCCTTCCTCAGTATCCACACATAAACGGCACTGTTAA 2 AGACCCCATGCCTTACGAACCATGCCTTCCTCAGTATCCACACAATAAACGGCACTGTTAA 2 AGACCCCATGCCTTACGAACCATCCTTCCTCAGTATCCACACAATAAAACGGCACTGTTAA 2	2673 2579	B 5
7	CTAGTTACCCTGACACAAGAAGTTCTTGTTCTTCAGGAGATGATTCTGTTTTTTCTCC 2	2519	В
672	CCTAGTTACCCTGACACAGAAGTTCTTGTTCTTCAGGAGATGATTCTGTTTTTTTCTCC 2	2613	γQ
518	GANTACTTGGACCTCAGCCAACCTCTCGAACAGTATTC 2	2459	Ф
612	CTCACTCTCACAACCAATGAGGAATACTTGGACCTCAGCCAACCTCTCGAACAGTATTC 2	2553	Qy
458	N	39	ф
552	CATGCAGTGCCCTCCCAGAGACCAACGTTCAAGCAGTTGGTAGAAGACTTGGATCGAAT 2	2493	Ş
398	N	33	Db '
492	AGAATGGATAAGCCAGCCAACTGCACCAACGAACTGTACATGATGATGAGGGACTGTTG 2	2433	Ś
338	CCCGTGGAGGAACTTTTTAAGCTGCTGAAGGAAGGACA 2	2279	DЪ
432	GGCTCGCCCTACCCAGGGATTCCCGTGGAGGAACTTTTTAAGCTGCTGAAGGAAG	2373	Ş
7	TCCTTCGGGGTGTTAATGTGGGAGATCTTCACTTTAGG 2	21	용 5
7	астовита во вотовитетото стостто се се тотова в тетера стора стотова стотова стотова стотова стотова стотова с	1 1	? ;
218		15	문 :
312	ACCAATGGGCGGCTTCCAGTCAAGTGGATGGCTCCAGAAGCCCTGTTTGATAGAGTA	2253	VΩ
158	ACTTTGGACTCGCCAGAGATATCAACAATATAGACTATTACAAAAAGA	2099	용
252	AAAATAGCAGACTTTGGACTCGCCAGAGATATCAACAATATAGACTATTACAAAAAG	2193	Q
192	CATCGAGATTTAGCAGCCAGAAATGTTTTGGTAACAGAAAA 	2133	gg Qy
ũ	SACTTGGTGTCATGCACCTACCAGCTGGCCAGAGGCATGGAGTACTTGGCTTCCCA 2	79	g
· ω	GTCATGCACCTACCAGCTGGCCAGAGGCATGGAGTACTTGGCTTCCCA 2	073	Qy
178	CCACCCGGGATGGAGTACTCCTATGACATTAACCGTGTTCCTGAGGAGCAGATGACCT	1919	Db
)72	GCCACCCGGGATGGAGTACTCCTATGACATTAACCGTGTTCCTGAGGAGCAGATGACCTT 20	2013	νQ
118	TATGTCATAGTTGAGTATGCCTCTAAAGGCAACCTCCGAGAATACCTCCGAGCCCGGA	1859	ф
)12	CTATGTCATAGTTGAGTATGCCTCTAAAGGCAACCTCCGAGAATACCTCCGAGCCCGGAG 20	1953	Qγ
158	AATATCATAAATCTTCTTGGAGCCTGCACACAGGATGGGCCTC	1799	В
152	ATTGGGAAACACAAGAATATCATAAATCTTCTTGGAGCCTGCACACAGGATGGG	1893	Qy
86	AGATGATGCCACAGAGAAAGACCTTTCTGATCTGGTGTCAGAGATGGAGATGATGAAGAT 18 111111111111111111111111111111111	1833 1739	B 6
	TGGGAATTGACAAAGACAAGCCCAAGGAGGCGGTCACCGTGGCCGTGAAGATGTTGAA	79	, d d

```
멍
                                       γQ
                                                    g
                                                                δÃ
                                                                               밁
                                                                                          ô
                                                                                                          В
                                                                                                                      Ş
                                                                                                                                    B
                                                                                                                                               οy
                                                                                                                                                              멍
                                                                                                                                                                          ð
                                                                                                                                                                                        망
                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                          δõ
                                                                                                                                                                                                                                                                        밁
             Š
                           밁
                                                                                                                                                                                                                                                                         2759
  3359
                                        3393
                                                      3239
                                                                  3333
                                                                                              3273
                                                                                                          3119
                                                                                                                                     3059
                                                                                                                                                  3153
                                                                                                                                                                             3093
                                                                                                                                                                                          2939
                                                                                                                                                                                                       3033
                                                                                                                                                                                                                    2879
                                                                                                                                                                                                                                 2973
                                                                                                                                                                                                                                              2819
              3453
                            3299
                                                                                                                                   TAACCCCTCTCACCTGCCGTGCGTTCTGGCTGTGGACCAGTAGGACTCAAGGTGGACGTG
                                                                                                                                                                                                                                             CGTTCTGCCTTCCTTGTTAATTTTGTAATAATTGGGAGAAGATTTATGTCAGCACACACTT
                                                                                                                                                                                                                                                                        GAGTAAATAATTGGAAAAGTAATCAGCATATGTGTAAAGATTTATACAGTTGAAAACTTG
                          CGTTCTGCCTTCCTTGTTAATTTTGTAATAATTGGAGAAGATTTATGTCAGCACACACTT
TGCTTGGACTTAACTAGTTATCAGATCCTTTGAAAAGAGAATATTTACAATATATGA 3509
                                                            ATGGTATAACGTTAATTAATTAATAAATTGGTAATATACAAAACAATTAATCATTTATAG 3392
                                                      ATGGTATAACGTTAATTTATTAATAAATTGGTAATATACAAAACAATTAATCATTTATAG
                                                                                                                                      3118
                                                                                                                                                   3212
                                                                                                                                                                 3058
                                                                                                                                                                             3152
                                                                                                                                                                                                        3092
                                                                                                                                                                                                                      2938
                                                                                                                                                                                                                                   3032
                                                                                                                                                                                                                                                2878
                                                                                                                                                                                                                                                             2972
                                                                                                                                                                                                                                                                          2818
                                                                                                                                                                                            2998
```

REFERENCE AUTHORS TITLE JOURNAL REMARK REFERENCE AUTHORS TITLE KEYWORDS SOURCE ORGANISM ACCESSION RESULT 6 HSFGFR2UB FEATURES ZERSION LOCUS JOURNAL Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 3248)
Steinberger, D. and Mueller, U.
New point mutations in FGFR2 associated with Crouzon Syndrome H.sapiens fgfr2 gene (exon 5).
269640
269640.1 GI:1200062
269640.1 GI:tbroblast growth factor Submitted (20-FEB-1996) Steinberger D., Genetics, Schlangenzahl 14, Giessen, Ge Location/Qualifiers Steinberger, D.
Direct Submission Homo sapiens. Homo sapiens HSFGFR2UB Unpublished (sites) (bases 1 to 3248) /organism="Homo sapiens" /isolate="proband 97" /db_xref="taxon:9606" /chromosome="10" /tissue_type="blood" /map="q26" /sex="Female" 3248 b_l con 5). ď DNA Germany, receptor Institute for rmany, 35392 linear PRI 25-JUN-1997

```
BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 3246; Conserv
         1042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           variation
                         721
                                                           661
                                                                           922
                                                                                            109
                                                                                                            862
                                                                                                                             541
                                                                                                                                             802
                                                                                                                                                              481
                                                                                                                                                                              742
                                                                                                                                                                                              421
                                                                                                                                                                                                               682
                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                 622
                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                 562
                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                  502
                                                                                                                                                                                                                                                                                                                                                  442
                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                     322
                                                                                                                                                                                                                                                                                                                                                                                                                                                       262
                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                   382
                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                      ш
                    GAGTTTAAGCAGGAGCATCGCATTGGAGGCTACAAGGTACGAAACCAGCACTGGAGCCTC
                                                                                                                        TTTCGCTGCCCAGCCGGGGGAACCCAATGCCATGCGGTGGCTGAAAAACGGGAAG
     ATCCTCCAAGCCGGACTGCCGGCAAATGCCTCCACAGTGGTCGGAGGAGACGTAGAGTTT
                                                                                                                                                                                          ACCGATGGTGCGGAAGATTTTGTCAGTGAGAACAGTAACAAGAAGAGAGACACATACTGG
                                                                                                                                                                                                                          ACTTGGTACTTCATGGTGAATGTCACAGATGCCATCTCATCCGGAGATGATGATGAGGATGAC
                                                                                                                                                                                                                                                            GCCACGCCTAGAGACTCCGGCCTCTATGCTTGTACTGCCAGTAGGACTGTAGACAGTGAA
                                                                                                                                                                                                                                                                                             GTGCACTTGGGGCCCAACAATAGGACAGTGCTTATTGGGGAGTACTTGCAGATAAAGGGC
                                                                                                                                                                                                                                                                                                                                                               ACCAACACAGAAAAGATGGAAAAAGCGGCTCCATGCTGTGCCTGCGGCCAACACTGTCAAG
                                                                                                                                                                  ACCAACACAGAAAAGATGGAAAAAGCGGCTCCATGCTGTGCCTGCGGCCAACACTGTCAAG
                                                                                                                                                                                                                                                                                                                              ACCTTGTCCCTGGCCCGGCCCTCCTTCAGTTTAGTTGAGGATACCACATTAGAGCCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                 915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             J86
/gene="fgfr2"
/product="fibroblast growth factor
/note="A(886)->G; Lys(292)->Glu"
/-bonotype="M. Crouzon"
788 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /number=5
886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .3248
/gene="fg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /gene="fgfr2"
/product="fibroblast
/note="exon U"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /dev_stage="adult"
1. .3248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /gene="
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              76.0%;
99.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           fgfr2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 3244.8;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 growth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ŋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ŋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                      1041
                      780
                                                                       981
                                                                                        660
                                                                                                                        600
                                                                                                        921
                                                                                                                                          861
                                                                                                                                                          540
                                                                                                                                                                          801
                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                             621
                                                                                                                                                                                                                                                                                                                                                                                                                                   60
                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                             681
                                                                                                                                                                                                                                                             360
                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                              561
                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                              501
                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                441
                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                  383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
           Ş
                            В
                                         Qy
                                                            В
                                                                           δÃ
                                                                                               밁
                                                                                                           QΥ
                                                                                                                                              δõ
                                                                                                                                밁
                                                                                                                                                                В
                                                                                                                                                                               Qy
                                                                                                                                                                                                 망
                                                                                                                                                                                                                γQ
                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                   Qγ
                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                    Ω<sub>γ</sub>
                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                    Qγ
                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                        δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                닭
            2122
                                                                                                                                                                 1561
                                                                                                                                                                                                                                   1441
                                                                                                                                                                                                                                                   1702
                                                                                                                                                                                                                                                                    1381
                                                                                                                                                                                                                                                                                                     1321
                                                                                                                                                                                                                                                                                                                                                                                                        1141
                                                                                                                                                                                                                  1762
                                                                                                                                                                                                                                                                                    1642
                                                                                                                                                                                                                                                                                                                                      1261
                                                                                                                                                                                                                                                                                                                                                      1522
                                                                                                                                                                                                                                                                                                                                                                       1201
                                                                                                                                                                                                                                                                                                                                                                                      1462
                                                                                                                                                                                                                                                                                                                                                                                                                                         1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                         1342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1282
                                                                                               1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                781
TTGGCTTCCCAAAATGTATTCATCGAGATTTAGCAGCCAGAATGTTTTTGGTAACAGAA
                        CAGATGACCTTCAAGGACTTGGTGTCATGCACCTACCAGCTGGCCAGAGGCATGGAGTAC
                                                                  CGAGCCCGGAGGCCACCCGGGATGGAGTACTCCTATGACATTAACCGTGTTCCTGAGGAG
                                                                                                   GATGGGCCTCTCTATGTCATAGTTGAGTATGCCTCTAAAGGCAACCTCCGAGAATACCTC
                                                                                                                          ATGGCGGAAGCAGTGGGAATTGACAAAGACAAGCCCAAGGAGGCGGTCACCGTGGCCGTG
                                                          CGAGCCCGGAGGCCACCCGGGATGGAGTACTCCTATGACATTAACCGTGTTCCTGAGGAG
                                                                                          GATGGGCCTCTCTATGTCATAGTTGAGTATGCCTCTAAAAGGCAACCTCCGAGAATACCTC
                                                                                                                                                                                                                              CCAAGAGATAAGCTGACACTGGGCAAGCCCCTGGGAGAAGGTTGCTTTGGGCAAGTGGTC
                                                                                                                                                                                                                                       CCAAGAGATAAGCTGACACTGGGCAAGCCCCTGGGAGAAGTTGCTTTGGGCAAGTGGTC
                                                                                                                                                                                                                                                               AAGCTGACCAAACGTATCCCCCTGCGGAGACAGGTAACAGTTTCGGCTGAGTCCAGCTCC
                                                                                                                                                                                                                                                                                                                                                                  TCCATGAACTCCAACACCCCGCTGGTGAGGATAACAACACGCCTCTCTTCAACGGCAGAC
                                                                                                                                                                                                                                                                                                                                                                                                            GAGATAGCCATTTACTGCATAGGGGTCTTCTTAATCGCCTGTATGGTGGTAACAGTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTTAACACCACGGACAAAGAGATTGAGGTTCTCTATATTCGGAATGTAACTTTTGAGGAC
                                                                                                                                                                                                                                                                                                        TCCATGAACTCCAACACCCCGCTGGTGAGGATAACAACACGCCTCTCTTGAACGGCAGAC
                                                                                                                                                                                                                                                                                                                                                                                                    GAGATAGCCATTTACTGCATAGGGGTCTTCTTAATCGCCTGTATGGTGGTAACAGTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                     TTGACAGTTCTGCCAGCGCCTGGAAGAGAGAAAAGGAGATTACAGCTTCCCCAGACTACCTG
```

₽ Ş Вb δÃ ₽ QΥ 밁 δ 밁 δÃ В Ωy 밁 Qy

Qy Db

1860 2121 1800 2061 1740 1881

1560 1821 1500

2001 1680 1941 1620 1761

1440 1701 1380 1641 1581 1260

1320

1200

1461 1140 1401 1281

960 1221

1080 1341 1020

1521

8 Q DЬ Ş 밁 QY Вb γQ 밁 οy

δõ

```
Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ρ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        B
                                                                                            9
                                                                                                                                      Ş
                                                                                                                                                                          Ş
                                                                                                                                                                                                 망
                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                       õ
                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                          рь
                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                QY
                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           д
                                                       δ
                                                                              b
                                                                                                                     밁
                                                                                                                                                        몽
   밁
                Š
                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2302
                                                                                                                                                                                                                                                                                                                                                           2401
                                                                                                                                                                                                                                                                                                                                                                                                                                                        2542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTCACTTTAGGGGGCTCGCCCTACCCAGGGATTCCCGTGGAGGAACTTTTTAAGCTGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AACAATGTGATGAAAATAGCAGACTTTGGACTCGCCAGAGATATCAACAATATAGACTAT
                                                                                                                                                                                                                                                                                                                   GATAGAGTATACACTCATCAGAGTGATGTCTGGTCCTTCGGGGGTGTTAATGTGGGAGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TACAAAAAGACCACCAATGGGCGGCTTCCAGTCAAGTGGATGGCTCCAGAAGCCCCTGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TACAAAAAGACCACCAATGGGCGGCTTCCAGTCAAGTGGATGGCTCCAGAAGCCCTGTTT 2301
TTGAAAACTTGTAATCTTCCCCAGGAGGAGAAGAAGGTTTCTGGAGCAGTGGACTGCCAC
                                                                                                                                                                                                                                                   ATGGATCAGAGGAGTAAATAATTGGAAAAGTAATCAGCATATGTGTAAAGATTTATACAG
                                                                                                                                                                                                                                                                              CCTAGCTACACTGAGCAGGGAGACCATGCCTCCCAGAGCTTGTTGTTCTCCACTTGTATAT
                                                                                                                                                                                                                                                                                                                                                                                                 GAACAGTATTCACCTAGTTACCCTGACACAAGAAGTTCTTGTTCTTCAGGAGATGATTCT
                                                                                                                                                                                                                                                                                                                                                                                                          GAACAGTATTCACCTAGTTACCCTGACACAAGAAGTTCTTGTTCTTCAGGAGATGATTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                      TTGGATCGAATTCTCACTCTCACAACCAATGAGGAATACTTGGACCTCAGCCAACCTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTGGATCGAATTCTCACTCTCACAACCAATGAGGAATACTTGGACCTCAGCCAACCTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAGGAAGGACACAGAATGGATAAGCCAGCCAACTGCACCCAACGAACTGTACATGATGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GATAGAGTATACACTCATCAGAGTGATGTCTGGTCCTTCGGGGTGTTAATGTGGGAGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTGGCTTCCCAAAAATGTATTCATCGAGATTTAGCAGCCAGAAATGTTTTGGTAACAGAA 1920
                                        AAGCCACCATGTAACCCCTCTCACCTGCCGTGCGTTCTGGCTGTGGACCAGTAGGACTCA 3021
                                                                                                                                                                                                                                         ATGGATCAGAGGAGTAAATAATTGGAAAAGTAATCAGCATATGTGTAAAGATTTATACAG
                                                                                                                                        AGGTGGACGTGCGTTCTCCTTGTTAATTTTGTAATAATTGGAGAAGATTTATGTC
                                                                                                                                                            AAGCCACCATGTAACCCCTCTCACCTGCCGTGCGTACTGGCTGTGGACCAGTAGGACTCA
                                                                                                                                                                                                   TTGAAAACTTGTAATCTTCCCCAGGAGGAGAAGAAGGTTTCTGGAGCAGTGGACTGCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1980
                                                                                                                                                                                                                                                                                                                                                            2460
                                                                                                                                                                                                                                                                                                                                                                                                                    2661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2040
                                          2940
                                                                                                                                          3081
                                                                                                                                                                                                                                                                                 2580
                                                                                                                                                                                                                                                                                                   2841
                                                                                                                                                                                                                                                                                                                                                                              2721
                                                                                                                                                                                                                                                                                                                                                                                                  2400
                                                                                                                                                                                                                                                                                                                                                                                                                                        2340
                                                                                                                                                                                                                                                                                                                                                                                                                                                           2601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2541
                                                              3201
                                                                                                                                                              2760
                                                                                                                                                                                                   2700
                                                                                                                                                                                                                      2961
                                                                                                                                                                                                                                          2640
                                                                                                                                                                                                                                                            2901
                                                                                                   3141
                                                                                                                       2820
```

```
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
TITLE
JOURNAL
REMARK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HSFGFR2UA
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δÃ
                                                                            BASE COUNT
ORIGIN
           ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                             FEATURES
                               Ouery Match
Best Local Similarity
Matches 3246; Conserv
                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3121
                                                                                                                                                                                         exon
                                                                                                                                                                                                               gene
                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                   variation
           262 GGTACCGTAACCATGGTCAGCTGGGGGTCGTTTCATCTGCCTGGTCGTGGTCACCATGGCA 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTTCAGGGAAAATGGTATAACGTTAATTATTAATAAATTGGTAATATACAAAACAATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATATATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATATATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTTCAGGGAAAATGGTATAACGTTAATTTATTAATAAATTGGTAATATACAAAACAATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 H.sapiens fgfr2 gene.
269641
269641 GI:1200061
FGFR2 gene; fibroblast g
Submitted (20-FEB-1996) Steinberger D., Insti
Genetics, Schlangenzahl 14, Giessen, Germany,
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                1 (bases 1 to 3248)
Steinberger,D., Mulliken,J. and Mueller,U.
New point mutations in FGFR2 associated with Crouzon
                                                                                                                                                                                                                                                                                                                                                            Steinberger, D. Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                       Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HSFGFR2UA
                                                                                                                                                                                                                                                                                                                                                                                             (sites)
                                                                                                                                                                                                                                                                                                                                                                                  (bases 1 to 3248)
                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3509
                                                                                        B
                                                                                                                                   /number=5
880
                                                                                       /gene="fgfr2"
/note="T(880)->G; Trp(;
/phenotype="M. Crouzon;
/ 737 c 808 g
                                                                                                                                                                                                              /tissue_type="blood"
/dev_stage="infant"
1. 3248
                                                                                                                                                                                                                                                                     /db_xref="taxon:9606"
/chromosome="10"
                                                                                                                                                                                                                                                                                             /organism="Homo sapiens"
/isolate="proband 56"
                                                                                                                                                                   /gene="fgfr2"
/product="fibroblast
                                                                                                                                                                                                 /gene="fgfr2"
                                                                                                                                                                                                                                               /sex="Male"
                                                                                                                                                         /note-"exon
                                                                                                                                                                                                                                                           /map="q26"
                                                                                                                                                                                                                                                                                           isolate="proband"
                                            76.0%;
                                 Score 3244.8;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           growth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3248
                                                                                                        Trp(290)->Gly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         dq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               factor
                                                                                                                                                                    growth
                                                                                         788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA
                                                                                         H
                                                         DΒ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             receptor
                                                                                                                                                                     factor
                                  2:
                                                         9
                                                                                                                                                                                                                                                                                                                                                  Institute
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                    Indels
                                                       Length
                                                                                                                                                                                                                                                                                                                                                    for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRI
                                                                                                                                                                                                                                                                                                                                                                                                                    Syndrome
                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-JUN-1997
                                    Caps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3321
                                    0;
```

342		1222 GTTAACACCACGGACAAGAGATTGAGGTTCTCTATATTCGGAATGTAACTTTTGAGGAC 1281 	1162 AACGGCAGTAAATACGGGCCCGACGGGCTGCCCTACCTCAAGGTTCTCAAGGCCCGCCGGT 1221	QY 1102 GTCTGCAAGGTTTACAGTGATGCCCAGCCCCAGATCCAGTGGATCAAGCACGTGGAAAAG 1161	QY 1042 ATCCTCCAAGCCGGACTGCCGGCAAATGCCTCCACAGTGGTCGGAGGAGACGTAGAGTTT 1101	Oy 982 TACGGGTCCATCAATCACGTACCACCTGGATGTTGTGGAGGGATCGCCTCACCGGCCC 1041	Qy 922 ATTATGGAAAGTGTGGTCCCATCTGACAAGGGAAATTATACCTGTGTGGTGGAGAATGAA 981	QY 862 GAGTTTAAGCAGGAGCATCGCATTGGAGGCTACAAGGTACGAAACCAGCACTGGAGCCTC 921	QY 802 TTTCGCTGCCCAGCCGGGGGAACCCAATGCCAATGCGGTGGCTGAAAAAACGGGAAG 861	Qy 742 ACCAACACAGAAAAGATGGAAAAGCGGCTCCATGCTGTGCCTGCGGCCAACACTGTCAAG 801	Qy 682 ACCGATGGTGCGGAAGATTTTGTCAGTGAGAACAGTAACAAGAAGAGAGCACCATACTGG 741	QY 622 ACTTGGTACTTCATGGTGAATGTCACAGATGCCATCTCATCCGGAGATGATGATGAGGATGAC 681	Qy 562 GCCACGCCTAGAGACTCCGGCCTCTATGCTTGTACTGCCAGTAGGACTGTAGACAGTGAA 621	Oy 502 GTGCACTTGGGGCCCAACAATAGGACAGTGCTTATTGGGGAGTACTTGCAGATAAAGGGC 561	Qy 442 TCGCTAGAGGTGCGCTGCCTGTTGAAAGATGCCGGCGTGATCAGTTGGACTAAGGATGGG 501	QY 382 GAGCCACCAACCAAATACCAAATCTCTCAACCAGAAGTGTACGTGGGTGG	61))
22 A 61 A	2362 TTCACTTTAGGGGGCTCGCCCTACCCAGGGATTCCCGTGGAGGAACTTTTTAAGCTGCTG 24	2302 GATAGAGTATACACTCATCAGAGTGATGTCTGGTCCTTCGGGGTGTTAATGTGGGAGATC 23	2242 TACAAAAAGACCACCAATGGGCGGCTTCCAGTCAAGTGGATGGCTCCAGAAGCCCTGTTT 23	1	1	801 (2002 CGAGCCCGGAGGCCACCCGGGATGGAGTACTCCTATGACATTAACCGTGTTCCTGAGGAG 20	942 (681 (1 2	1822 AAGATGTTGAAAGATGATGCCACAGAGAAAGACCTTTCTGATCTGGTGTCAGAGATGGAG 1	1762 ATGGCGGAAGCAGTGGGAATTGACAAAGACAAGCCCAAGGAGGCGGTCACCGTGGCCGTG 1	02 41	1642 ACCCCCATGCTGGCAGGGTCTCCGAGTATGAACTTCCAGAGGACCCAAAATGGGAGTTT 1	1 2	61	01	41	1400 CACAMACOCAMMINACINOSAMACOCAMACINAMINACINA

	2 ATATATGA 3509 1 ATATATGA 3248	350: 324:	8 dd
3501 3240	2 AGTTAATCTATTGCTTGGACTTAACTAGTTATCAGATCCTTTGAAAAGAGAATATTTACA 	3447	Оy
3441 3180	2 ATCATTTATAGTTTTTTTTGTAATTTAAGTGGCATTTCTATGCAGGCAG	3387 3127	Qу
3381 3120	2 TTTCAGGGAAAATGGTATAACGTTAATTTAATAAATTGGTAATATACAAAACAATTA	3322 3061	gg Qy
3321 3060	2 TGCTGTTCTTACACATAATTTCTTAATTTTCACCGAGCAGAGGTGGAAAAATACTTTTGC 	3262 3001	94 94
3261 3000	2 ATGGATGTCCCAATGCACCTAGAAAATTGGTCTCTCTTTTTTTAATAGCTATTTGCTAAA 	3202 2941	ОУ
3201 2940	AAATTATGTATAAATATATATATATATATTTGCAAGGAGTTATTTTTTTT	3142 2881	Qy Db
3141 2880	AGCACACACTTACAGAGCACAAATGCAGTATATAGGTGCTGGATGTATGT	3082 2821	ОУ
3081 2820	AGGTGGACGTGCGTTCTGCCTTCCTTAATTTTGTAATAATTGGAGAAAGATTTATGTC	3022 2761	g 9
3021 2760	; AAGCCACCATGTAACCCCTCTCACCTGCCGTGCGTTCTGGCTGTGGACCAGTAGGACTCA 	2962 2701	dg VQ
2961 2700	TTGAAAACTTGTAATCTTCCCCAGGAGGAGAAGAAGGTTTCTGGAGCAGTGGACTGCCAC	2902 2641	Db Qy
2901 2640	ATGGATCAGAGGAGTAAATAATTGGAAAAGTAATCAGCATATGTGTAAAGATTTATACAG 	2842 2581	Oy Db
2841 2580	CCTAGCTACACTGAGCAGGGAGACCATGGCTCCCAGAGCTTGTTGTCTCCACTTGTATAT	2782 2521	99
2781 2520	GGCAGTGTTAAAACATGAATGACTGTGTCTGCCTGTCCCCAAACAGGACAGCACTGGGAA	2722 2461	Оу
2721 2460	GTTTTTTCTCCAGACCCCATGCCTTACGAACCATGCCTTCCTCAGTATCCACACATAAAC:	2662 2401	gy Qy
2661 2400	GAACAGTATTCACCTAGTTACCCTGACACAAGAAGTTCTTGTTCTTCAGGAGATGATTCT :	2602 2341	9d 6
2601 2340	TTGGATCGAATTCTCACTCTCACAACCAATGAGGAATACTTGGACCTCAGCCAACCTCTC 2	2542 2281	A O
2541 2280	AGGGACTGTTGGCATGCAGTGCCCTCCCAGAGACCAACGTTCAAGCAGTTGGTAGAAGAC 2	2482 2221	ρ γ

```
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                    BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 8
HSFGFR2MR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FOCUS
                    Š
                                                                   В
                                                                                                          Ş
                                                                                                                                                      Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REMARK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                            Query Match 76.6
Best Local Similarity 99.9
Matches 3246; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      variation
                                                                                                                                                      382 GAGCCACCAACCAAATACCAAATCTCTCAACCAGAAGTGTACGTGGCTGCGCCAGGGGAG 441
                                                                                                             322
                                                                   61
                                                                ACCTTGTCCCTGGCCCGGCCCTCCTTCAGTTTAGTTGAGGATACCACATTAGAGCCAGAA 120
                                                                                     ACCTTGTCCCTGGCCGGCCCTCCTTCAGTTTAGTTGAGGATACCACATTAGAGCCAGAA 381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Submitted (25-APR-1996) Steinberger D., Institute for Humangenetics, Schlangenzahl 14, Giessen, Germany, 35392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Steinberger, D.
Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Eukaryota; Metazoa; Chordata; Catarrhini; Hominidae; Homo. Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 3248) Steinberger, D. and Mueller, U. Steinberger, D. and Mueller, U. New point mutations in FGFR2 associated with Crouzon Syndrome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  H.sapiens FGFR2 mRNA.
Z71929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HSFGFR2MR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FGFR2 gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           271929.1 GI:1296624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (sites)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (bases 1 to 3248)
                                                                                                                                                                                                                                                                                                                                                           915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /Codon_start=1
//protein_id="CAA96492.1"
//protein_id="CAA96492.1"
//db_xref="Gi1296625"
//db_xref="Gi1296625"
//db_xref="SWISS-PROT:P21802"
//translation="MYSWGREICLVMTMATLSLARPSFSLVEDTTLEPEEPPTKYQI
//translation="MYSWGREICLVMTMATLSLARPSFSLVEDTTLEPEEPPTKYQI
//translation="MYSWGREICLVMTMATLSLARPSFSLVEDTTLEPEEPPTKYQI
//translation="MYSWGREICLTMTMATLSLARPSFSLVEDTYLEGYKORNOHMSUS
SQPEYVYAAPGESLEUVRCLLKADAVISWTKDGVHLGEPWSENSNNRAPYWTNTE
SQPEYVYAAPGESLEUVRUNTDAISSGDDEDDTDGAEDFVSENSNNRAPYWTNTE
KMEKRLHAVPBANTVKFRCPAGGNPMTMRMLKNGKEFKQEHRIGGYKVRNOHMSLIM
KMEKRLHAVPBANTVKFRCPAGGNPMTMRMLKNGKEFKQEHRIGGYKVRNOHMSLIM
KMEKRLHAVPBANTVKFRCPAGGNPMTMRMLKUNGKEFKQENVINTEN INTOIGVFLIACMV
VCVYSDAOPHIOWIKHVERNGSKYGPDGLPVLKVLKAAGVMTTDKELEVLYIRVTF
EDAGEYTCLAGNSIGISFISAWLTVLPAFGREKEITASPDYLEIAIYCIGVFLIACMV
VTVILCMKNUTKKDDFSQPANHKLTKRIPLRRQVTVSAESSSSMNSNTPLVRITTR
LSSTADTPMLAGVSEYELPEDPKWEPPRDKLTIGKHKNIINLGAGCTQODGPLVIVEY
ASKGNLREYLLARRPPGMEYSYDINKVEEDDMKHTGKHKNIINLGAGCTOODGPLVIVEY
ASKGNLREYLLARRPPGMEYSYDINKVEEDDMTFKDLVSCTYQLARGMEYLASQKCIH
RBLAARNVLYTBLNNYMKIADFGLARDINNIDYYKKTTMCRLPVKMMAPELHDRVTH
OSDVMSFGVLMWEIFTLGGSPYPGIPVEELFKLLKSGHRUNKPAGCW
HAVPSGRPTFKQLVEDLDRILTITTNEEYLDLSOPLEQYSPSYPDTRSSCSSGDDSVF
SDDPMPYEPCLPQYPHINGSVKT"
                                                                                                                                                                                                                                                                                                                                                              D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tics, Schlangenzahl 14,
                                                                                                                                                                                                                                                                                                                                                         /note="g(1037)->c; Cys342->Ser"
/phenotype="Crouzon Syndrome"
/replace="g"
/replace="g" 808 g 788 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /gene="FGFR2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /gene="FGFR2"
13. .2478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /db_xref="taxon:9606"
/chromosome="10q26"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /isolate-"proband
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Homo sapiens"
/isolate="proband 113"
                                                                                                                                                                                                                                                                                                                                                                                                                                                 /gene="FGFR2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /tissue_type="blood"
|3..2478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .3248
                                                                                                                                                                                                                                                                      76.0%;
                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                      Score 3244.8;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3248 bp
                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 mRNA
                                                                                                                                                                                                                                                                                          DB 9;
                                                                                                                                                                                                                                                   2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                          Length 3248;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRI 17-FEB-1997
                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                        0
```

δõ В

В

1641 1320

204 236 210 242 216 248 222 228	00 OV	1282 GTGGGGAATATACGCGACTTGAGGTTCTCTATATTCGCAATGTACCTTTTGAGGAC 1281 1961 GTTAACACCACGACAAAGAGATTGAGGTTCTCTATATTCGCAATGTAACCTTTTGAGGAC 1281 1962 GCTGGGGAATATACGTGCTTGCGGGGTAATTCTCTATATTCGGAATATACCTTTTGAGGAC 1020 1282 GCTGGGGAATATACGTGCTTGGCGGGTAATTCTTATTGGGATATCCTTTTCACTCTGCATGG 1341 1021 GCTGGGGAATATACGTGCTTGGCGGGTAATTCTATTGGGATATCCTTTCACTCTGCATGG 1080 1342 TTGACAGTTCTGCCAGCGCCTGGAAGAAAGGAAAAGGAATATCCATTCCACAGACTACCTG 1401 1081 TTGACAGTTCTGCCAGCGCCTGGAAGAAAAGGAAATTACAGCTTCCCCAGACTACCTG 1140 1402 GAGATAGCCATTTACTGCATAGGGGTCTTCTTTAATTCCTTTCACCTTTCACCTGCATCACTT 1140 1402 GAGATAGCCATTTACTGCATAGGGGTCTTCTTTAATTCCTTTATTGGTGGTAACAGTCATC 1461 1111111111111111111111111111111111
2062 CAGATG	00 00 00 00 00 00 00 00 00 00 00 00 00	### ##################################
1822 AAGATGTTGAAAGATGATGCCACAGAGAAAGACCTTTCTGATCTGGTGTCAGAGATGGAG	04 D QA D Q	742 ACCAACACAGAAAAGATGGAAAAGCGGCTCCATGCTGCGGCCCAACACTGCTAAG 801
	ор ор ор ор ор	121 GAGCCACCAACCAACTACCAAATCTCTCAACCAGAAGTGTACGTGGCTGCACCAGGGGAG 180 442 TCGCTAGAGGTGCGCTGCTGTTGAAAGATGCCGCCGTGATCAGTGGCTGCACCAGGGGAG 180 442 TCGCTAGAGGTGCGCTGCTGTTGAAAGATGCCGCCGTGATCAGTTGGACTAAGGATGGG 501

0y 0y 0y 0y 0y 0y 0y 0

DP GA

DP OA

Qy

밁 Qy В Qγ В 9 밁 QY DЬ ρy gg Qg 뫄 Ωy Д

2181

1860 2121 1800 1740 2001

2061

1941

1620 1881 1560 1821 1500 1761 1440 1701

1680

2481

2160 2421 2100 2361 2040 2301 1980 2241 1920

2541

```
망
                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                              9
                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                      ₽
  RESULT 9
HUMKGFRA
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                              밁
                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                  В
                                                                                                                                                                                                                              Š
                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                  δÃ
                                                                                                                                     Ş
                                                                                                                                                  맘
                                                                                                                                                            Ş
                                                                                                                                                                        밁
                                                                                                                                                                                 Ş
                                                          멍
                                                                    Ωy
                                                                               9
                                                                                          Q
                                                                                                     В
                                                                                                               Š
                                                                                                                           DЬ
                                                                                                                                                                                                                                                                                                                                 2521
                                                                                                                                                                                                                                                                                                                                            2782
                                                                                                                                                                                                                                                                                                                                                       2461
                                                                                                                                                                                                                                                                                                                                                                  2722
                                                                                                                                                                                                                                                                                                                                                                             2401
                                                                                                                                                                                                                                                                                                                                                                                                   2341
                                                                                                                                                                                                                                                                                                                                                                                                              2602
                                                                                                                                                                                                                                         2761
                                                                                                                                                                                                                                                     3022
                                                                                                                                                                                                                                                                2701
                                                                                                                                                                                                                                                                           2962
                                                                                                                                                                                                                                                                                     2641
                                                                                                                                                                                                                                                                                                 2902
                                                                                                                                                                                                                                                                                                           2501
                                                                                                                                                                                                                                                                                                                      2842
                                                                                                                                                                                                         3142
                                                                                                                                                                                                                    2821
                                                           3241
                                                                                                                                                   3001
                                                                                                                                                                        2941
                                                                                                                                                                                   3202
                                                                                                                                                                                              2881
                                                                                                                                                                                                                                                                                                                                                      GGCAGTGTTAAAACATGAATGACTGTGTCTGCCTGTCCCCAAACAGGACAGCACTGGGAA
                                                                                                                                                                                                                                                                                                                                                                                        GTTTTTTCTCCAGACCCCATGCCTTACGAACCATGCCTTCCTCAGTATCCACACATAAAC
                                                                                                                                                                                                                                                                                                                                                                                                  CCTAGCTACACTGAGCAGGGAGACCATGCCTCCCAGAGCTTGTTGTCTCCCACTTGTATAT
                                                                                                                                                                                                                                                                                                                                                                             TGCTGTTCTTACACATAATTTCTTAATTTTCACCGAGCAGAGGTGGAAAAATACTTTTGC
                                                                                                                                                                                              ATATATGA 3509
                                                                                                                                                                        AAGCCACCATGTAACCCCTCTCACCTGCCGTGCGTTCTGGCTGTGGACCAGTAGGACTCA 3021
                                                                                                                                                                                                                                                                                                            ATGGATCAGAGGAGTAAATAATTGGAAAAGTAATCAGCATATGTGTAAAGATTTATACAG
                                                                                                                                                                                                                                                                                                                  ATGGATCAGAGGAGTAAATAATTGGAAAAGTAATCAGCATATGTGTAAAGATTTATACAG
                                                                                ATATATGA
Homo:
  M80634
M80634.1 GI:186740
keratinocyte growth factor
Homo saplens Mammary gland
                          Human
                              HUMKGFRA
                        keratinocyte growth
                                                           3248
                          3106 bp
th factor
   receptor.
                          receptor mRNA,
                                mRNA
                                linear
                          complete cds
                                PRI 27-APR-1993
                                                                                                                                                                                                                                                      3081
                                                                                                                                                                                                                                                                 2760
                                                                                                                                                                                                                                                                                       2700
                                                                                                                                                                                                                                                                                                  2961
                                                                                                                                                                                                                                                                                                                       2901
                                                                                                                                                                                                                                                                                                                                  2580
                                                                                                                                                                                                                                                                                                                                              2841
                                                                                                                                                                                                                                                                                                                                                         2520
                                                                                                                                                                                                                                                                                                                                                                   2781
                                                                                                                                                                                                                                                                                                                                                                              2460
                                                                                                                                                                                                                                                                                                                                                                                         2721
                                                                                                                                                                                                                                                                                                                                                                                                     2400
                                                                                                                                                                                                           3201
                                                                                                                                                                                                                                3141
                                                                                                                                                                                                                                                                                                             2640
                                                                                                                  3441
                                                                                                                                                                         3000
                                                                                                                                                                                     3261
                                                                                                                                                                                                2940
                                                                                                                                                                                                                                           2820
                                                                                                                              3120
                                                                                                                                         3381
                                                                                                                                                    3060
                                                                                                                                                               3321
                                                                                                                                                                                                                     2880
                                                                                                                                                                               BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
                                                                           Ş
                                                                                       B
                                                                                                  Ş
                                                                                                             Db
                                                                                                                       Ş
                                                                                                                                   В
                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                               FEATURES
                                           В
                                                     Š
                                                                  망
                     밁
                              δ
                                                                                                                                                                                                                                                                                                                                                   JOURNAL
MEDLINE
PUBMED
                                                                                                                                                                                                                                                                                                                                                                               TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                        CDS
          361
                     446
                                           386
                                                                  326
                                                                             181
                                                                                        268
                                                                                                  121
                                                                                                              209
                                                                                                                                    149
                                301
                                                      241
                                                                                                                        61
                                                                                                                                              ш
                                                                                                                                                                                                                                                                                                                                                                    gene
```

```
Query Match
Best Local Similarity
Matches 2887; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCATCCCGACCCACGCGGGGCGCGGGGACAACACAGGTCGCGGAGGAGCGTTGCCATTC 120
                                                               CTGGTCGTGGTCACCATGGCAACCTTGTCCCTGGCCCGGCCCTCCTTCAGTTTAGTTGAG
                                                                                                                                                                                                      TIGCGCGTAGTCCATGCCCGTAGAGGAAGTGTGCAGATGGGATTAACGTCCACATGGAGATTGCGCGTAGAGGGATTAACGTCCACATGGAGATGGGAGATGGGATTAACGTCCACATGGAGATGGAGATGGGATTAACGTCCACATGGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGTGACTGCAGCAGCAGCGGCAGCGCCTCGGTTCCTGAGCCCACCGCAGGCTGAAGGCA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCCAAGGACCACTCTTCTGCGTTTTGGAGTTGCTCCCCACAACCCCCGGGCTCGTCGCCTTTC 60
GATACCACATTAGAGCCAGAAGAGCCACCAAACCAAATACCAAATCTCTCAACCAGAAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCCAAGGACCACTCTTCTGCGTTTGGAGTTGCTCCCCGCCAACCCCGGGCTCGTTGCTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Chan, A.M. and Aaronson, S.A.
Determination of ligand-binding specificity by splicing: two distinct growth factor receptors
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa: Chordata; Craniata; Pertebrata; E
Mammalla; Eutheria; Prinates; Catarrhini; Hominidae;
1 (bases 1 to 3106)
Miki, T., Bottaro, D.P., Fleming, T.P., Smith, C.L., Burg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Proc. Natl. Acad. Sci. U.S.A. 92108030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /product="Keratinocyte growth factor receptor"
/product="Keratinocyte growth factor receptor"
/product="Keratinocyte growth factor receptor"
/product="Keratinocyte growth factor receptor"
/db_xref="GI:186741"
/db_xref="GI:186741"
/translation="MYSWGREICLVVVTMATLSLARPSESLVEDTTLEPEEPPTKYOI
/translation="MYSWGREICLVVDANISGTVEDTTLEPEEPPTKYOI
/translation="MYSWGREICLVDANISGTVEDTTLEPEEPPTKYOI
/translation="MYSWGREICLVDANISGTVEDTTLEPEEPPTKYOI
/translation="MYSWGREICLVDANISGTVEDTTLEPEEPPTKYOI
/translation="MYSWGREICLTVDANISGTVEDHANISGTVEDTT"
/translation="MYSWGREICLTVTHENOVARESGENGENGINSSNAEVLALFNVTEAD
/translation="MYSWGREICLTVTHENOVARESPHRPILQAGLPANASTVVGGDVEF
/translation="MYSWGREICLTVTHENOVARESGERGOVVMAEAVGINKDK
/translation="MYSWGREICLTVTHENOVAREAVGINKDK
/translation="MYSWGREICLT">MYSWGREICLTVTHENOVAREAVGINKDK
/translation="MYSWGREICLT"/translation="MYSWGREICLT"/translation="MYSWGREICLT"/translation="MYSWGREICLT"/translation="MYSWGREICLT"/translation="MYSWGREICLT"/translation="MYSWGREICLT"/translation="MYSWGREICLT"/translation="MYSWGREICLT"/translation="MYSWGREICLT"/translation="MYSWGREICLT"/translation="MYSWGREICLT"/translation="MYSWGREICLT"/translation="MYSWGREICLT"/translation="MYSWGREICLT"/translation="MYSWGREICLT"/translation="MYSWGREICLT"/translation="MYSWGREICLT"/translation="MYSWGREICLT"/translation="MYSWGREICLT"/translation="MYSWGREICLT"/translation="MYSWGREICLT"/translation="MYSWGREICLT"/translation="MYSWGREICLT"/translation="MYSWGREICLT"/translation="MYSWGREICLT"/translation="MYSWGREICLT"/translation="MYSWGREICLT"/translation="M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /db_xref="tax..../cell_line="B5/589"
/cell_type="Epithelial cell"
/cell_type="Mammary gland"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /codon_start-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note-"putative"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               65.2%;
97.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; Score 2781.8;
; Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (1),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DΒ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      62;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 246-250 (1992)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 3106;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     alternative
encoded by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Burgess, W.H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ο
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               325
                                                                                                                                                                                                                                                                                        300
                                                                                                                                                                                                                                                                                                                                                            385
                                                                                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      208
                                                                                                                                                 360
                                                                                                                                                                                                                 445
              420
                                                                                 505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ហ
```

THANTCGCCTGTATGGTGGTAACAGTCATCCTGTGCCGAATGAAGAACACGACCAAGAAG 1491 	AAGGAGATTACAGCTTCCCCAGACTACCTGGAGATAGCCATTTACTGCATAGGGGTCTTC 1431 	ATATCCTTTCACTCTGCATGGTTGACAGTTCTGCCAGCGCCTGGAAGAGAA 1371	CGGAATGTAACTTTTGAGGACGCTGGGGAATATACGTGCTTGGCGGGTAATTCTATTGGG 1320	AAGGTTCTCAAGGCCGCGGTGTTAACACCACGGACAAAGAGATTGAGGTTCTCTATATT 1260	TGGATCAAGCACGTGGAAAAGAACGGCAGTAAATACGGGCCCGACGGGCTGCCCTACCTC 1200 	GTCGGAGGAGACGTAGAGTTTGTCTGCAAGGTTTACAGTGATGCCCAGCCCCACATCCAG 1140 	GAGCGATCGCCTCACCGGCCCATCCTCCAAGCCGGACTGCCGGCAAATGCCTCCACAGTG 1080	ACCTGTGTGGGGGAGAATGAATACGGGTCCATCAATCACACGTACCACCTGGATGTTGTG 1020	CGAAACCAGCACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCTGACAAGGGAAATTAT 960 	CGGTGGCTGAAAAACGGGAAGGAGTTTAAGCAGGAGGATCGCATTGGAGGCTACAAGGTA 900 	CCTGCGGCCAACACTGTCAAGTTTCGCTGCCCAGCCGGGGGAACCCAATGCCAACCATG 840	AACAAGAGAGCACCATACTGGACCAACACAGAAAAGATGGAAAAGCGGCTCCATGCTGTG 780	TCCGGAGATGATGAGACACCGATGGTGCGGAAGATTTTGTCAGTGAGAACAGTAAC 720	01 AGTAGGACTGTAGACAGTGAAACTTGGTACTTCATGGTGAATGTCACAGATGCCATCTCA 660 	GAGTACTTGCAGATAAAGGGCGCCACGCCTAGAGACTCCGGCCTCTATGCTTGTACTGCC 600	81 ATCAGTIGGACTAAGGATGGGGTGCACTIGGGGCCCAACAATAGGACAGTGCTTATIGGG 540 	21 IACHTECHCECHEGERGTCGCTRAGAGGTGCCGTTGAAAGATGCCGCCGTG 480	٥
Db 2660 AGACCAACGTTCAAGCAGTTGGTAGAAGACTTGGATTCTCACTCTCACACCAAT 2571	2452	0 10	2332 2480	2272 2420	2212 2360	0 2	0 2	2032	1972 2120	12 60	0 2	1792 1940	80	1672 1820	1612 <i>t</i> 1760 <i>t</i>	1700	1640	

Ouery Match Best Local Similarity 89.7%; Pred. No. 0; Matches 3029; Conservative 0; Mismatches 1; Indels 348; Gaps 1; Oy 1 CCCAAGGACCACTCTTCTGCGTTTGGAGTTGCCCAAACCCCGGGCTCGCTTTC 60 [RESULT 10 AX329662 AX329662 LOCUS DEFINITION Sequence 171 from Patent WOO194629. ACCESSION ACCESSION AX329662.1 GI:18102640 KEYWORDS SOURCE ORGANISM Homo sapiens ELKaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammaila; Eutheria; Primates; Catarrhini; Hominidae; Homo. REFERENCE AUTHORS TITLE Gencer gene determination and therapeutic screening using signature gene sets JOURNAL Patent: WO 0194629-A 171 13-DEC-2001; AVAION Pharmaceuticals (US) FEATURES SOURCE JOCATION 861 a 795 c 852 g 736 t	Oy 2572 GAGGAATACTTGGACCTCAGCCAACCTCTCGAACAGTATTCACCTAGACACA 2631
Qy 1021 GAGCGATCGCCTCACCGGCCAATCCCTCCACAGTGCCGCAATGCCTCCACAGTGCTCTCACAGTGCTTCTACAGTGTT 111111111111111111111111111111111	661 TCCGGAGATGATGATGACACCGATGGTGCGGAAGATTTTGTCAGTGAGAACAGTAAC	Qy 241 TATGGAAGAGGACCGGGGATTGGTACCATAGCATGGTCAGCTGGGTCGTTCATCTGC 300

2460	1 GAGGAACTTTTTAAGCTGCTGAAGGAAGGACACAGAATGGATAAGCCAGCC	Qy 240	_
2266	GGGGTGTTAATGTGGGAGATCTTCACTTTAGGGGGCTCGCCCTACCCAGGGATTCCCGTG	2	_
2400	1 GGGGTGTTAATGTGGGAGATCTTCACTTTAGGGGGCTCGCCCTACCCCAGGGATTCCCGTG	23	
2340	THIS TO A TOTAL THE TABLE TO A TABLE TO A TOTAL TO A TOTAL TO A TOTAL TO A TOTAL TOT	21	
14	THE ATTECT TO A CARACTE TO THE TOTAL TO A CARACTER TO A CA	2 6	٠,
2280	1 GATATCAACAATATAGACTATTACAAAAAGACCACCAATGGGCGGCTTCCAGTCAAGTGG	Qy 222	
0	7 AGAAATGTTTTGGTAACAGAAAACAATGTGATGAAAATAGCAGACTTTGGACTCGCCAGA	Db 202	_
2220	1 AGAAATGTTTTGGTAACAGAAAACAATGTGATGAAAATAGCAGACTTTGGACTCGCCAGA	QY 216	_
02	57 CTGGCCAGAGGCATGGAGTACTTGGCTTCCCAAAAATGTATTCATCGAGATTTAGCAGCC	Db 196	_
2160	1 CTGGCCAGAGGCATGGAGTACTTGGCTTCCCAAAAATGTATTCATCGAGATTTAGCAGC	ОУ 210	_
96	07 ATTAACCGTGTTCCTGAGGAGCAGATGACCTTCAAGGACTTGGTGTCATGCACCTACCAG	Db 190	
0	1 ATTAACCGTGTTCCTGAGGAGCAGATGACCTTCAAGGACTTGGTGTCATGCACCTACC	Qy 204	_
90	47 GGCAACCTCCGAGAATACCTCCGAGCCCGGAGGCCACCCGGGATGGAGTACTCCTATGAC	Db 184	_
2040	1 GGCAACCTCCGAGAATACCTCCGAGCCCGGGAGGCCACCCGGGATGGAGTACTCCTAT	Qy 198	_
84	87 CTTCTTGGAGCCTGCACACAGGATGGGCCTCTATGTCATAGTTGAGTATGCCTCTAAA	Db 178	
98	TTCTTGGAGCCTGCACACAGGATGGGCCTCTCTATGTCATAGTTGAGTATGCCTCT	Oy 19:	_
1786	27 GATCTGGTGTCAGAGATGGAGATGATGAAGATTGAGAAGAACACAAGAATATCATAAAT	17	
	ATCTGGTGTGTAGAGAGAGATGATGATGAGGAGGAGGAGGAGG	18	_
7 8		b 16	
מ מ	AGGCGGTCACCGTGGCCGTGAAGATGTTGAAAGATGATGCCACAGAGAAGAAGACCTT	у 18	
1666		16	
	GTTGCTTTGGGCAAGTGGTCATGGCGGAAGGGGGGGGGG	17	
60		15	
74	AGGACCCAAAATGGGAGTTTCCAAGAGATAAGCTGACACTGGGCAAGCCCCTGGGAC	Qу 16	
1680 1546	21 GGCTCTCTTCAACGGCAGACACCCCCATGCTGGCAGGGGTCTCCGAGTATGAACTTCCA	Db 14	
1486	7 GTTTCGGCTGAGTCCAGCTCCTCCATGAACTCCAACACCCCCGCTGGTGAGGATAACAAC	. 14	
1620	1 GTTTCGGCTGAGTCCAGCTCCTCCATGAACTCCAACA	15	
1426	7	14	
1560	1 AGCAGCCAGCCGGCTGTGCACAAGCTGACCAAACGTAT	15	
1426	27	14	
1500	41 TGTATGGTGGTAA	0у 14	
1426	27	Db 14	
1440	B1 ACAGCTTCCCCAGACTACCTGGAGATAGCCATTTACTGCATAGGGGTCTTCTTAATCGCC	Qу 13	
1426	.27	Db 14	
1380	21 ATATCCTTTCACTCTGCATGGTTGACAGTTCTGCCAGCGCCTGGAAGAGAAAAGGAGATT	0у 13	

RESUL! HUMKS! LOCUS DEFIN	ఠ	Qy	Db :	ΟV	Db :	Qy	B 75		γQ	Дb	Qy	В	Qγ	뭥	Q E	<u> </u>	0	8 8	} {	ş 8	Db	δδ	망	Qy	Db	Qy	Дb	Qγ	Db &	?
T 11 SAMIII	3227	3361	167	3301	107	3241	3047	ف د	3121	2927	3061	2867	3001	807	941	7 6	80 8	2687	9 0	76	256 7	2701	2507	2641	2447	2581	2387	2521	2327	
HUMKSAMIII 3244 bp mRNA linear PRI 06-JAN-1995 Human secreted fibroblast growth factor receptor (K-sam-III) mRNA, complete cds.	TGGTAATATACAAAACAA 3244	AATATACAAAACAA 3378	GAGGTGGAAAAATACTTTTGCTTTCAGGGAAAATGGTATAACGTTAATTTATTAATAAAT 3226	STGGAAAATAOTTTTTGOTTTTOACCCAAAATTAOCTTATAACCTTTATAACCTTTTTTTT	TTTTAATAGCTATTTGCTAAATGCTGTTCTTACACATAATTTTTCACCGAGCA 3166	TAATAGCTATTTGCTAAATGCTGTTCTTACACATATTTTTTTT	TATTTTTTGTATTGATTTAAATGGATGTCCCAATGCACCTACAAAATTGGTCTCTCTTT 3240	GGATGTATGTAAATATATTCAAA	GATGTATGTAAATATATCAAATTATGTATAAATATATATA	98	AATTIGGAGAAGATTTATGTCAGCACACACTTACAGAGCACAAATGCAGTATATAGGTGC 31	292	TGGACCAGTAGGACTCAAGGTGGACGTGCGTTCTGCCTTCCTT	TCTGGAGCAGTGGACAAAGCCACCATGTAACCCCCTCCACCTGCCGTGCGTTCTG 2866	AGCAGTGGACTGCCACAAGCCACCATGTAAGCTTCCCCAGGAGGAGGAAGAAGGTT 280	TATESTON AND ALLE ALLE AND A	CTOTABAGATTATATATATATATATATATATATATATATATAT	80	ACAGGACAGCACTGGGAACCTAGCTACACTGAGCAGGGAGACCATGCCTCCCAGAG	CAPACAGGACAGCACTGGGAACCTAGCTACACTGAGCAGGGAGACCATGCCTCCCAGAGC 2820	CAGTATCCAC	CTCAGTATCCACACATAAACGGCAGTGTTAAAACATGAATGA	G -	TCTTCAGGAGATGATTCTGTTTTTTCTCCAGACCCCATGCCTTACGAACCATGCC		TGGACCTCAGCCAACCTCTCGAACAGTATTCACCTAGTTACCCTGACACAAGAAGTTCT 264	AATGAGGAATAC 244	AAGCAGTTGGTAGAAGACTTGGATCGAATTCTCACTCTCACAACCAATGAGGAATAC 258	ANCORACTO TACATGATGAGGACTGTTGGCATGCAGTGCCTCCCAAAGACCAACG 2520	

```
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                             8
                                                                                          Ş
                                                                                                                                В
                                                                                                                                                        γ
                                                                                                                                                                                               В
                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                 Вb
                                                                                                                                                                                                                                                                                                                                                             å
                         δõ
 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
MEDLINE
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 3029; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sig_peptide
                                                                                                                                                                181
                                                                                                                                                                                                   335
                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                 215
                                                                 455
                                                                                                                                                                                                                                                                  275
 515
                                                                                                 241
                                                                                                                                   395
                                301
                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                TCCATCCCGACCCACGCGGGGCGCGGGGACAACACAGTCGCGGAGGAGCGTTGCCATTC 120
                                                                                                                                                                                                                                   AAGTGACTGCAGCAGCGGCGCGCGCCTCGGTTCCTGAGCCCACCGCAGGCTGAAGGCA 180
                                                                                                                                                                                                   AAGTGACTGCAGCAGCGGCAGCGCCTCGGTTCCTGAGCCCACCGCAGGCTGAAGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Red//71.1 GI:186781
K-sam-III; fibroblast growth factor receptor.
Homo sapiens cDNA to mRNA.
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Katoh, M., Hattori, Y., Sasaki, H., Tanaka, M., Sugano, K., Yazaki, Y., Sugimura, T. and Terada, M.
K.sam gene encodes secreted as well as transmembrane receptor tyrosine kinase proc. Natl. Acad. Sci. U.S.A. 89 (7), 2960-2964 (1992) 92212948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 3244)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.98
                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /product="fibroblast growth factor receptor"
/protein_1d="AAA59471.1"
/protein_1d="AAA59471.1"
/db_xref="GI:186782"
/db_xref="GI:186782"
/tranalation="MYSWGRFICLVVVTMATLSLARPSFSLVEDTTLEPEEPPTKYQI
/tranalation="MYSWGRFICLVVVTMATLSLARPSFSLVEDTTLEPEEPPTKYQI
SQPEVYVAAPGESLEVRCLLKDAAVISWTKDGVHLGPNURTVLIGEYLQIKGAPPRDS
GLYACTASRTVUSETWYFMYNVTDAISSGDDEDDTOGAEDPVSENSNUKRAPYWTUTE
KMEKRHAVPAANTVUKERCPAGGUPMOTMRULKUGKEFRQEHRIGGYKYBROHWSLIM
ESVVPSDKGNYTCVVENEYGSINHTYHLDVVERSPHRPILQAGLPANASTVVGDVEF
VCKVVSDAQPHIQWIKHVEKNGSKYGPDCLPYLKVLKVSAESSSSMNSUTPUVRITTR
VCKVVSDAQPHIQWIKHVEKNGSKYGPDCLPYLKVLKVEAESSSSMNSUTPUVRITTR
LSSTADTPMLAGVSEYELPEDPKWEFFPRDKLTLGKENGEGSGOVMAEAVGIDKDKP
KEAVTYAVKMLXDDATEKDLSDLVSEMEMMKIGKHKNIINLLGACTQDGFLYVIVEY
ASKGNLREYLRARRPPGMEYSVDINRVPEEDFKTLLSGTYQLARGMEYLASQKCIH
RDLAARRVLYTENNVMIADFGLARDINNIDYYKKTTUGRLPVKMMAPEALFDRVYTH
QSDVMSFGVLMWEIFFILGGSPYPGIPVEELFKLLKEGHRUNDKPAKUTNELYMMARDCW
HAVPSQRPTFKQLVEDLDRILTTTNEEYLDLSQPLEQYSPSYPDTRSSCSSGDDSVF
SPDPMPYEPCLPQYPHINGSVKT"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /cell_line="NCC-IT"
l. .3244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Homo sapiens"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /gene="K-sam-III"
795 c 852 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /gene="K-sam-III"
188. .2605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /gene="K·sam-III"
                                                                                                                                                                                                                                                                                                                                                                                                                62.6%;
                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                Score 2670.4;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   736 t
                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 9;
                                                                                                                                                                                                                                                                                                                                                                                                    ب
--
                                                                                                                                                                                                                                                                                                                                                                                                    Indels 348; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 3244;
                                   360
                                                                      514
                                                                                                                                     454
                                                                                                                                                                    240
                                                                                                                                                                                                    394
                                                                                                                                                                                                                                                                                                                                       274
                                                                                                                                                                                                                                                                                                                                                                     60
      574
                                                                                                                                                                                                                                                                                                                                                                                                      <u>ب</u>
```

142		1427	g
144	ACAGCTTCCCCAGACTACCTGGAGATAGCCATTTACTGCATAGGGGTCTTCTTAATCGCC	1381	γQ
142		1427	B
1380	TCTGCATGGTTGACAGTTCTGCCAGCGCCTGGAA	1321	QУ
1426		1427	ф
	CGGAATGTAACTTTTGAGGACGCTGGGGAATATACGTGCTTGGCGGGTAATTCTATTGGG	1261	QY
1426	AAGGTTCTCAAG	1415	₽
1260	. 5~e	1201	Qγ
1200 1414	TGGATCAAGCACGTGGAAAAGAACGGCAGTAAATACGGGCCCGACGGGCTGCCCTACCTC	1141 1355	Qy
1354	GTCGGAGGAGACGTAGAGTTTGTCTGCAAGGTTTACAGTGATGCCCAGCCCCACATCCAGIIIIIIIIII	1081 1295	υр
N	AGCGATCGCCTCACCGGCCCATCCTCCAAGCCGGACTGCCGGCAAATGCCTCCAC	1235	뮹
1080	GAGCGATCGCCTCACCGGCCCATCCTCCAAGCCGGAACTGCCGGGAAATGCCTCCACAGTG	1021	δ
1020 1234	ACCTGTGTGGGGGAATGAATACGGGTCCATCAATCACACGTACCACCTGGATGTTGTG	961 1175	용 성
960 1174	CGAAACCAGCACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCTGACAAGGGAAATTAT 	901	B 6
900 1114	CGGTGGCTGAAAAACGGGAAGGAGTTTAAGCAGGAGCATCGCATTGGAGGCTACAAGGTA 		р О
840 1054	CCTGCGGCCAACACTGTCAAGTTTCGCTGCCCAGCCGGGGGAACCCAATGCCAACCATG	781 995	₽ 2
780 994	AACAAGAGAGCACCATACTGGACCAACAGAAAAGATGGAAAAGCGGGTCCATGCTGTG	721 935	₽, ₩
720 934	TCCGGAGATGATGAGATGACACCGATGGTGCGGAAGATTTTGTCAGTGAGAACAGTAAC 	661 875	₽ 5
660 874	AGTAGGACTGTAGACAGTGAAACTTGGTACTTCATGGTGAATGTCACAGATGCCATCTCA	01	8 5
600	GAGTACTTGCAGATAAAGGGCGCCACGCCTAGAGACTCCGGCCTCTATGCTTGTACTGCC 	541 755	8 %
540 754	ATCAGTTGGACTAAGGATGGGGTGCACTTGGGGGCCCAACAATAGGACAGTGCTTATTGGG 	481 695	8 5
480 694	TACGTGGCTGCGCCAGGGGAGTCGCTAGAGGTGCGCTGCCTGTTGAAAGATGCCGCCGTG	421 635	8 8
634	GATACCACATTAGAGCCAGAAGAGCCACCAACCAAATACCAAATCTCTCAACCAGAAGTG	361 575	₽ ₹

2580	TTCAAGCAGTTGGTAGAAGACTTGGATCGAATTCTCACTCTCACAACCAATGAGGAATAC 2	2521	Qγ
38	8=8	ü	ф
2	ACGAACTGTACATGATGAGGGGACTGTTGGCATGCAGTGCCCTCCCAGAGACCAACG	2461	Qy
2460 2326	GAGGAACTTTTTAAGCTGCTGAAGGAAGGACACAGAATGGATAAGCCAGCC	2401	рь
2266		20	Db
20	TITELLI	2147	Ş B
ũ	TGGCTCCAGAAGCCCTGTTTGATAGAGTATACACTCATCAGAGTGATGTCTGGTCCTTC	2281	Qy
14	GATATCAACAATATAGACTATTACAAAAAGACCACCAATGGGCGGCTTCCAGTCAAGTGG	2087	Ъ
28	ATATCAACAATATAGACTATTACAAAAAGACCACCAATGGGCGGCTTCCAGTCAAGTGG	2221	Qy
2086		0	Db ·
) (GAAATGTTTTGGTAACAGAAAACAATGTGATGAAAATAGCACACTTTGGACTCCCCACA	2161	γΩ
0 1	CTGGCCAGAGGCATGGAGTACTTGGCTTCCCAAAAATGTATTCATCGAGAGTTTAGCACCC	1967	8
16	TGGCCAGAGGCATGGAGTACTTGGCTTCCCAAAAATGTATTCATCGAGATTTAGCAGCC	2101	Qγ
96		1907	ф
_	ATTAACCGTGTTCCTGAGGAGCAGATGACCTTCAAGGACTTGGTGTCATGCACCTACC	2041	Qy
1906	GCAACCTCCGAGAATACCTCCGAGCCCGGAGGCCACCGGGATGGAGTACTCCTATGAC	84	ᆼ
2	GGCAACCTCCGAGAATACCTCCGAGCCCGGAGGCCACCCGGGATGGAGTACTACTTAT	1981	Qy
. 00	CTTCTTGGAGCCTGCACACAGGATGGCCCTCTCTATGTCATAGTTGAGTATGCCTCTAAA	1787	дb
86	CTTCTTGGAGCCTGCACACAGGATGGGCCTCTCTATGTCATAGTTGAGTATGCCTC	1921	Qy
78		72	8
92	GATCTGGTGTCAGAGATGGAGATGAAGATGATGGGAAACACAAGAATATCAT	1861	VΩ
72	GAGGCGGTCACCGTGGCCGTGAAGATGTTGAAAGATGCTGCCACAGAGAAAGACCTTTCT	1667	망
1860	GAGGCGGTCACCGTGGCCGTGAAGATGTTGAAAGATGATGCCACAGAGAAAGACCTT	1801	δ
1800 1666	SULL SULL SULL SULL SULL SULL SULL SUL	0 4	B 2
1606	GOTTE CONTROL OF THE	, ,	2 8
1740	GAGGACCCAAAATGGGAGTTTCCAAGAGATAAGCTGACACTGGGCAAGCCCCTGGGAGAA	1547	} {
1546	CGCCTCTTCAACGGCAGACACCCCCATGCTGGCAGGGGTCTCCGAGTATGAACTTCC	4 6	문
1680	1 CGCCTCTCTTCAACGGCAGACACCCCCCATGCTGGCAGGGGTCTCCGAGTATGAACTTCCA	50	Qy
1486	TTTCGGCTGAGTCCAGCTCCTCCATGAACTCCAACACCCC	•	Db
1620	CACCCCGCTGGTGAGGATAACAAC	1561	Qy
1426	7	1427	DЪ
9.		1501	γo
4	!	1427	망
1500	1 TGTATGGTGGTAACAGTCATCCTGTGCCGAATGAAGAACACGACCAAGAAGCCAGACTTC	144]	Qy

```
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                   RESULT 12
AF211257
                                                                            В
                                                                                       δõ
                                                                                                    밁
                                                                                                                Qy
                                                                                                                              밁
                                                                                                                                         Ş
                                                                                                                                                        В
                                                                                                                                                                   δÕ
                                                                                                                                                                                             Qγ
                         ACCESSION
                                      DEFINITION
                                             LOCUS
                                                                                                                                                                                 밁
                                                                                                                                                                                                           Ъ
                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                             ₽
                                                                                                                                                                                                                                                                        δÃ
                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                                                                                                           δÃ
                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                        망
                                                                                                                                                                                                                                                                                                                                                     δõ
                                                                                                                                                                                                                                                                                                                                                                  Дb
                                                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                            ₽
                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                              ₽
                                                                            3227
                                                                                         3361
                                                                                                     3167
                                                                                                                 3301
                                                                                                                              3107
                                                                                                                                                        3047
                                                                                                                                                                    3181
                                                                                                                                                                                 2987
                                                                                                                                                                                              3121
                                                                                                                                                                                                           2927
                                                                                                                                                                                                                        3061
                                                                                                                                                                                                                                     2867
                                                                                                                                                                                                                                                3001
                                                                                                                                                                                                                                                             2807
                                                                                                                                                                                                                                                                         2941
                                                                                                                                                                                                                                                                                       2747
                                                                                                                                                                                                                                                                                                                2687
                                                                                                                                                                                                                                                                                                                            2821
                                                                                                                                                                                                                                                                                                                                         2627
                                                                                                                                                                                                                                                                                                                                                     2761
                                                                                                                                                                                                                                                                                                                                                                  2567
                                                                                                                                                                                                                                                                                                                                                                               2701
                                                                                                                                                                                                                                                                                                                                                                                            2507
                                                                                                                                                                                                                                                                                                                                                                                                        2641
                                                                                                                                                                                                                                                                                                                                                                                                                     2447
                                                                                                                                                                                                                                                                                                                                                                                                                                              2387
                                                                          TAATTGGAGAAGATTTATGTCAGCACACACTTACAGAGCACAAATGCAGTATATAGGTGC
                                                                                                                                  TTTTAATAGCTATTTGCTAAATGCTGTTCTTACACATAATTTCTTAATTTTCACCGAGCA
                                                                                                                                                                                                                                CAAACAGGACAGCACTGGGAACCTAGCTACACTGAGCAGGGAGACCATGCCTCCCAGAGC
                                                                                                                          TTTTAATAGCTATTTGCTAAATGCTGTTCTTACACATAATTTCTTAATTTTCACCGAGCA
                                                                                                                                                                                                                                                         TCTGGAGCAGTGGACTGCCACAAGCCACCATGTAACCCCTCTCACCTGCCGTGCGTTCTG
                                                                                                                                                                                                                                                                TCTGGAGCAGTGGACTGCCACAAGCCACCATGTAACCCCTCTCACCTGCCGTGCGTTCTG
                                                                                                                                                                                                                                                                                          TATGTGTAAAGATTTATACAGTTGAAAACTTGTAATCTTCCCCAGGAGGAGGAGAAGGAT 2940
                                                                                                                                                                                                                                                                                                           TATGTGTAAAGATTTATACAGTTGAAAACTTGTAATCTTCCCCAGGAGGAGAAGAAGGTT
                                                                                                                                                                                                                                                                                                                                                              complete cds.
AF211257
AF211257.1 G1
                                     AF211257
Canis far
                                     familiaris
                  GI:6671356
                                   3809 bp
fibroblast growth
                                mRNA linear MAM 05-JAN-200 factor receptor 2 (FGFR2) mRNA,
                                         MAM 05-JAN-2000
                                                                                                                                       3300
                                                                                                                                                    3106
                                                                                                                                                                 3240
                                                                                                                                                                                           3180
                                                                                                                                                                                                                    3120
                                                                                                                                                                                                                                                                      3000
                                                                                                                            3166
                                                                                                                                                                               3046
                                                                                                                                                                                                        2986
                                                                                                                                                                                                                                 2926
                                                                                                                                                                                                                                              3060
                                                                                                                                                                                                                                                         2866
                                                                                                                                                                                                                                                                                   2806
                                                                                                                                                                                                                                                                                                                                     2686
                                                                                                                                                                                                                                                                                                                                                  2820
                                                                                                                                                                                                                                                                                                                                                               2626
                                                                                                                                                                                                                                                                                                                                                                           2760
                                                                                                                                                                                                                                                                                                                                                                                        2566
                                                                                                                                                                                                                                                                                                                                                                                                     2700
                                                                                                                                                                                                                                                                                                                                                                                                                  2506
                                                                                                                                                                                                                                                                                                                                                                                                                              2640
                                                                                                                                                                                                                                                                                                                                                                                                                                           2446
```

REFERENCE

Canis familiaris. Canis familiaris Cuanis familiaris Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; 1 (bases 1 to 3809)

Euteleostomi; Canis.

```
JOURNAL
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                           δÃ
                                                                                                   В
                                                                                                                                ð
                                                                                                                                                                      밁
                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                            망
                                                                                                                                                                                                                                                                       Q
                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                 망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
õ
                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Simi
Matches 3134;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
   1148
                                                                                                                                                                                                                                                                                                                                                                                                                    788
                                                                                                                                                                                                                                                                                                                                                                                                                                                      259
                                                                                                                                                                           499
                                    619
                                                                                                                                                                                                           968
                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCAACACTGTCAAGTTTCGCCTGCCCAGCCGGGGGGAACCCAATGCCAACCATGCGGTGGC
                                  CGCCTCACCGGCCCATCCTACAAGCCGGACTGCCGGCAAATGCCTCCACAGTGGTCGGAG
                                                                                                                                                                                             TGGTGGAGAATGAATACGGGTCCATCAATCACACGTACCACCTGGATGTTGTGGAGCGAT
                                                                                                                                                                                                                                                                ACCACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCTGACAAGGGAAATTATACCTGTG
                                                                                                                                                                                                                                                                                                                                                                                   CCAATACTGTCAAGTTTCGCTGTCCAGCTGGGGGGAATCCAACACCAACTATGAGGTGGC
   AGCACGTGGAAAAGAACGGCAGTAAATACGGGCCCGACGGGCTGCCCTACCTCAAGGTTC
                                                                                                                                                                           TGGTAGAGAATGAGTATGGCTCCATTAATCACACGTACCACCTCGACGTCGTCGAGCGAT
                                                                                                                                                                                                                                                AGCACTGGAGCCTTATTATGGAGAGCGTGGTCCCATCCGACAAAGGAAATTACACCTGTG
                                                                                                        CGCCACACCGGCCCATCCTCCAAGCTGGGCTGCCGGCAAATCGCTCCACCGTGGTCGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nguyen,T.L. a
Keratinocyte
Cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nguyen,T.L. and Chevaller,S.
Direct Submission
Submitted (03-pEC-1999) Surgery, Urology, Montreal General Hospital
Research Institute, 1650 Cedar Avenue, Montreal, QC H3G 1A4, Canada
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (bases 1 to 3809)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /translation-www.www.techanytmatls.larpsenlvedttlepegapywint
/kranslation-www.www.techanytmatls.larpsenlvedttlepegapywint
/kranslation-www.www.cekanytptmwilknukkeekgehriggykyrnqhwsli
Mesyvpsdkgnytgvveneygsinhtythdyvensphhpiloachpanstyvgddye
Fvckyysdaophigwikhveknoskygddlpylkvlkhsginssnævlalenvtee
Evgrysdaophigwikhveknoskygdplepylkhsginssnævlalenvtee
Dageyickvsnyigoangsamltylpkogapybekeitaksdyssamsnytplkeit
Trlsstadtphlagvssyelpedpkwefprdklylgeggregovymæavgidke
Myvtyllcrhktytekpdesgopavhkitkriplkroutysaessssmnsnytplkeit
Trlsstadtphlagvssyelpedpkwefprdklylgeggregovymæavgidke
Kpkeavtyavkmikddatekdlsdlysememkinigkhkniinllgacfgdplyviv
Eyaskgnlreylrarrppgmeysydinkvpeegmfkdlysctyolargmeylasgkg
Ihrdlaarnvlytennwkiadeglardinnidykktffkglhpkwmaapealfdry
Thgsdywsfcylmweitfleggspyfgipveelfkllkechrmdkpancffkelymmrd
Cwhavpsgrffkglvedldrilttreeyldlsoplegyspsypdtrsscssgdds
Vfsdddmprectlpychvngsigt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /product="fibroblast growth factor receptor /protein_id="AAF23172.1" /db_xref="G1:6671357"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
1. .3809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /gene="FGFR2"
/note="keratinocyte growth factor receptor"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /gene="FGFR2"
150..2273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Canis familiaris"
/db_xref="taxon:9615"
/cell_type="epithelium"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /tissue_type="prostate"
1. .3809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       and Chevalier, S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Growth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Factor

 Mismatches

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Receptor in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2642.4;
No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         376;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Canine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Prostatic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3809;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           56;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Epithelial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                               1027
                                                                                                                                            1087
                                                                                                                                                                                                                                                                                                                    438
                                                                                                                                                                                                                                                                                                                                                      907
                                                                                                                                                                                                                                                                                                                                                                                         378
                                                                                                                                                                                                                                                                                                                                                                                                                         847
                                                                                                          618
                                                                                                                                                                               558
                                                                                                                                                                                                                                                 498
                                                                                                                                                                                                                                                                                  967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21;
```

```
Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                           ρ
                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                            Š
                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                           ő
                                                                                                                                                                                                                                                                                                                                                                                                                                      ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Š
                                                          ð
                                                                                    ₽
                                                                                                           Ş
                                                                                                                                     В
                                                                                                                                                          Qy
                                                                                                                                                                                       멍
                                                                                                                                                                                                            δõ
                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                      В
           Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1379
                                                                                                                                                                                                                                                                                                                                         1333
                                                                                                                                                                                                                                                                                                                                                                                                                                        1213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1093
                                                                                                                                                                                                                1979
                                                                                                                                                                                                                                        1453
                                                                                                                                                                                                                                                                                                                                                                                       1273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TAACTTTTGAGGACGCTGGGGAATATACGTGCTTGGCGGGTAATTCTATTGGGATATCCT 1327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCAAGCACTCGGGAATAAATAGTTCCAATGCAGAAGTGCTGGCTCTGTTC-----AATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCAAGGCCGCCGGTGTTAACACCACGGACAAAGAGATTGAGGTTCTCTATATTCGGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCTGTATGGTGGTAACAGTCATCCTGTGCCGAATGAAGAACACGACCAAGAAGAGCCAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTCACTCTGCATGGTTGACAGTTCTGCC------AGCGCCTGGAAGAGAAAAGGAGA 1378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGACTGAGGAGGATGCTGGGGGAGTATATATGTAAGGTCTCCAATTATATAGGGCAGGCCA
                                                                                                                                                                                                                                                                                                                                                                                     CAGTTTCGGCTGAGTCCAGCTCCTCCATGAACTCCAACACCCCGCTGGTGAGGATAACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCAGCAGCCAGCTGTGCACAAGCTGACCAAGCGCATCCCCTTGCGGAGACAGGTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTACGGCTTCCCCAGACTACCTGGAGATAGCCATTTACTGCATAGGGGTCTTCCTAATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTACAGCTTCCCCAGACTACCTGGAGATAGCCATTTACTGCATAGGGGTCTTCTTAATCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCAGTCTGCCTGGCTCACTGTCCTGCCAAAACAGCAAGCTCCTGTAAGAGAAAAAGGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGAGGACCCAAAATGGGAGTTTCCAAGAGATAAGCTGACACTGGGCAAGCCCCTGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGCGCCTCTCCTCAACAGCAGACACCCCCATGCTGGCAGGGGGTCTCCGAGTATGAACTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CACGCCTCTCTTCAACGGCAGACACCCCCATGCTGGCAGGGGGTCTCCGGAGTATGAACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGTGTCTGCTGAGTCCAGCTCCTCTATGAACTCCAACACTCCGCTGGTGAGGATAACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCAGCAGCCAGCCGGCTGTGCACAAGCTGACCAAACGTATCCCCCTGCGGAGACAGGTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCTGTATGGTGGTGACAGTCATCCTGTGCCGAATGAAGACCACAACCAAGAAGCCAGACT
                                    CCAGAAATGTTTTGGTAACAGAAAACAATGTGATGAAAATAGCAGACTTTGGACTCGCCA
                                                                                                                                     AGGAGGCGGTCACCGTGGCCGTGAAGATGTTGAAAGATGATGCCACAGAGAAAAGACCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                      CGGAAGATCCAAAGTGGGAGTTTCCCCAGAGATAAGCTGACGCTGGGCAAACCTCTGGGGG
GAGATATCAACAATATAGACTATTACAAAAAGACCACCAATGGGCGGCTTCCCAGTCAAGT
                                                                                                    AGCTGGCCAGAGGCATGGAGTACTTGGCTTCCCAAAAATGTATTCATCGAGATTTAGCAG
                                                                                                                                                                                                   AAGGCAACCTCCGAGAATACCTCCGAGCCCGGAGGCCACCCGGGATGGAGTACTCCTATG
                                                                                                                                                                                                                                        ATCTCCTTGGAGCCTGTACTCAGGATGGCCCACTCTACGTCATTGTGGAGTATGCCTCGA
                                                                                                                                                                                                                                                    ATCTTCTTGGAGCCTGCACACAGGATGGGCCTCTCTATGTCATAGTTGAGTATGCCTCTA 1978
                                                                                     AAGGCAACCTCCGTGAATACCTCCGAGCCCGGAGGCCGCCTGGGATGGAGTATTCCTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            792
                                                                                                                                                                                                                                                                                          1452
                                                                                                                                                                                                                                                                                                                  1918
                                                                                                                                                                                                                                                                                                                                                                 1858
                                                                                                                                                                                                                                                                                                                                                                                          1332
                                                                                                                                                                                                                                                                                                                                                                                                                   1798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1438
                                                                  2218
                                                                                         1692
                                                                                                                 2158
                                                                                                                                           1632
                                                                                                                                                                 2098
                                                                                                                                                                                           1572
                                                                                                                                                                                                                  2038
                                                                                                                                                                                                                                           1512
                                                                                                                                                                                                                                                                                                                                                                                                                                          1272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            972
                2278
                                         1752
```

77	ACCESSION VERSION		Db 2829 ACCGAGCAGGGGTGGAAAAGTACTTTTGCTTTCAGGGAAAAAAAA
	DEFINITION		QY 3293 ACCGAGCAGGAGGTGGAAAAATACTTTTGCTTTCAGGGAAAATGGTATAACGTTAA 3347
+	HUMFGFR2A LOCUS		Db 2769 TCTTTTGTTTTAATAGCTATTTGCTAAATGCTGTTCTTACACAGAATTTCTTAATTTTC 2828
	DECIT III 15		
A A-	La)		270
AAG	Qy 4227		3176 GGAGTTATTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT
ATA	Db 3724		OY 3117 GTGCTGGATGTATGT-AAATATATTCAAATTATGTATAAAATATATATATATATAT
ATO			2589
-GE			QY 3057 GTAATAATTGGAGAAGATTTATGTCAGCACACACTTACAGAGCACAAATGCAGTATATAG 3116
CG	Db 3604		Db 2529 CTGGCTGTGGACCAGCTGGACTCAAGGCAAACCTACTTTCTTGCCTTCCTT
- G	Оу 4048		
AG -	Db 3544	-	Db 2472 GTTTCTGGGCCAATGGACTGCCATGGGCCACCACGCGCCCATGACCCGCTGTGGGTA 2528
AGC	Оу 3990		
1G	Db 3484		24
100	Оу 3930		
TA	Db 3425		
. I	Оу 3870		
<u>7</u> _	Db 3365		229
Ú.	Оу 3812	-	2759 CCCAAACAGGACAGCACTGGGAACCTAGGTACATTGATCTACATCAT
	-		TITLE TOTAL CONTROL OF THE PROPERTY TOTAL CAN A STREET TOTAL CAN
AT	0у 3752		TTCCTCAGTATCACACATAAAACACCCACTATAAAACACCTCACTACT
۲ – – ج	ω	·	
TA	Qу 3693		2639 CTTCTTCTTCACCACATCATTCACTACATCACTCACATCACCAC
၉ –	Db 3186		
ရှိ	Qу 3633		ACTTGGACCTCAGCCAACCTCTCGAACAGTATTCACCTTTTAGTTACCCTCACACAACAACAGTATTTTACCTTTTAGTTTACCCTCACACAACAGTATTTTACCTTTTAGTTTTACCCTTTAGTTTTACCCTTTTAGTTTTACCCTTTTAGTTTTACCCTTTTAGTTTTACCCTTTTAGTTTTACCCTTTTAGTTTTACCCTTTTAGTTTTACCCTTTTAGTTTTACCCTTTTAGTTTTACCCTTTTAGTTTTACCTTTTAGTTTTACCTTTTAGTTTTACCTTTTAGTTTTACCTTTTAGTTTTACCTTTTAGTTTTACCTTTTAGTTTTACCTTTTAGTTTTACCTTTTAGTTTTACCTTTTAGTTTTACCTTTTAGTTTTACCTTTTAGTTTTACCTTTTAGTTTTACCTTTTAGTTTTAGTTTTACCTTTTAGTTTTAGTTTTAGTTTTAGTTTTAGTTTTAGTTAGTTAGTTTAGTTTAGTTTAGTTTAGTTTAGTTTAGTTTAGTTTAGTTTAGTTTAGTTTAGTTTAGTTAGTTTAGTTTAGTTTAGTTTAGTTTAGTTTAGTTTAGTTTAGTTTAGTTTAGTTTAGTTTAGTTAGTTTAGTTAGTTTAGTTTAGTTTAGTTAGTTAGTTAGTTTAGTTAGTTAGTTTAGTTAGTTAGTTTAGTAG
급=	Db 3127		
CT	Qy 3573		
17 -	Db 3069		
1	Qy 3514		CCAACGAACTGTACATGATGATGAGGGACTGTTGGCATGCAGTGCTCTCCTACAGACA
0-	Db 3009		Db 1933 TGGAGGAACTATTTAAGCTGCTCAAGGAGGGCCACAGGATGGACAAGCCAGCAAACTGCA 1992
i i	ОУ 3455		
TA	Db 2949		1873 TCGGGGTGTTAATGTGGGAGATCTTCACGCTGGGGGGCTCACCATACCCAGGGATTCCGG
1	Qу 3397		
11 -	Db 2889		_
11	ФУ 3348		
		_	Db 1753 GAGATATCAACAATATAGACTATTACAAAAAGACCACAAATGGGCGACTTCCGGTCAAGT 1812

HUMFGFR2A 3080 bp mRNA linear PRI 08-NOV-1994 Homo sapiens fibroblast growth factor receptor 2 IIIb (FGFR2) mRNA, complete cds. M97193 M97193.1 GI:182566

```
JOURNAL
MEDLINE
PUBMED
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                         Š
                                                                                                                                                                                     B
                                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BASE COUNT
ORIGIN
              Ş
                                                 밁
                                                                                Š
                                                                                                                      밁
                                                                                                                                            Qy
                                                                                                                                                                                                                                                           Ъ
                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 2674; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gene
                                                                                                                        519
                                                                                                                                                                                           459
                                                                                                                                                                                                                                                                399
                                                                                                                                                                                                                                                                                                                                 339
                                                                                                                                                                                                                            121
                  301
                                                                                   241
                                                                                                                                                        181
                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                    —
                                                                                                                    TCCATCCCGACCCACGCGGGGGCGCGGGGACAACACAGGTCGCGGAGGAGGAGCGTTGCCATTC 120
                                                                                                                                                                                                                                                                                                                                                CCCAAGGACCACTCTTCTGCGTTTGGAGTTGCCCCCACAACCCCGGGCTCGTCGCTTTC
CTGGTCGTGGTCACCATGGCAACCTTGTCCCTGGCCCGGCCCTCCTTCAGTTTAGTTGAG
                                                                                                                                                                                     AAGTGACTGCAGCAGCAGCGGCAGCGCCTCGGTTCCTGAGCCCACCGCAGGCTGAAGGCA 180
                                                                      TATGGAAGAGAGGACCGGGGATTGGTACCGTAACCATGGTCAGCTGGGGTCGTTTCATCTGC
                                                                                                                                                                                                                                                                                                                                   CCCAAGGACCACTCTTCTGCGTTTGGAGTTGCTCCCCACAACCCCGGGCTCGTCGCTTTC
                                                    TATGGAAGAGGACCGGGATTGGTACCGTAACCATGGTCAGCTGGGGTCGTTTCATCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 binding specificity
J. Biol. Chem. 267
93016048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 (bases 1 to 3080)
Dell,K.R. and Williams,L.T.
A novel form of fibroblast growth factor r
splicing of the third immunoglobulin-like
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        fibroblast growth factor receptor 2; ligand binding Homo sapiens placenta cDNA to mRNA. Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1400433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /product="fibroblast growth factor receptor 2"
/db_xref="gi:182567"
/db_xref="gi:182567"
/db_xref="gi:182567"
/db_xref="gi:18267"
/db_xref="gi:18
                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /gene='
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /gene="FGFR2"
/note="'human FGFR2 IIIb'"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /map="10q26"
/t1ssue_type="placenta"
1. .3080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Homo sapiens"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                     61.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FGFR2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (29),
                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                     Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                       Score 2603.6;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21225-21229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Craniata; Vertebrata;
Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                         BG
                                                                                                                                                                                                                                                                                                                                                                                                        59;
                                                                                                                                                                                                                                                                                                                                                                                                                                         9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        domain
                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          confers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alternative
                                                                                                                                                                                                                                                                                                                                                                                                        15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                     398
                                                                                                                                                                                                                                                                                                                                                                      60
                                                                                                                         578
                                                                                                                                                          240
                     360
                                                                                                                                                                                                                                                                                                                                                                                                        2,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   日
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δδ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                      õ
                                                                                                                                                                                                                                                                                                                                                                                                                         맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Š
                                                                                                       Ş
                                                                                                                                          밁
                                                                                                                                                                         Ş
                                                                                                                                                                                                               멍
                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                     밁
     밁
                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1119
                                                                                                                                                                                                                                                                                    1479
                                                                                                                                                                                                                                                                                                                   1141
                                                                                                                                                                                                                                                                                                                                                     1419
                                                                                                                                                                                                                                                                                                                                                                                                                           1359
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCTGTGTGGGGGAGAATGAATACGGGTCCATCAATCACACGTACCACCTGGATGTTGTG 1020
```

AGTAGGACTGTAGACAGTGAAACTTGGTACTTCATGGTGAATGTCACAGATGCCATCTCA 998 660

1058 720

CCTGCGGCCAACACTGTCAAGTTTCGCTGCCCAGCCGGGGGGAACCCAATGCCAACCATG AACAAGAGAGCACCATACTGGACCAACACAGAAAAGATGGAAAAAGCGGCTCCATGCTGTG AACAAGAGAGCACCATACTGGACCAACACAGAAAAGATGGAAAAAGCGGCTCCATGCTGTG 1178 1118 840 780

CGGTGGCTGAAAAACGGGAAGGAGTTTAAGCAGGAGCATCGCATTGGAGGCTACAAGGTA 900 1238

CGAAACCAGCACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCTGACAAGGGAAATTAT 960 CGAAACCAGCACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCTGACAAGGGAAATTAT 1298

GAGCGATCGCCTCACCGGCCCATCCTCCAAGCCGGACTGCCGGCAAATGCCTCCACAGTG 1080 1418

1200

AAGGTTCTCAAGGCCGCGGTGTTAACACCACGGACAAAGAGATTGAGGTTCTCTATATT 1260 1538

AAGGTTCTCAAGCACTCGGGGATAAATAGTTCCAATGCAGAAGTGCTGGCTCTGT-----1593

CGGAATGTAACTTTTGAGGACGCTGGGGAATATACGTGCTTGGCGGGTAATTCTATTGGG 1320 ATATCCTTTCACTCTGCATGGTTGACAGTTCTGCC------AGCGCCTGGAAGAGAA 1371 -TCAATGTGACCGAGGCGGATGCTGGGGAATATATATGTAAGGTCTCCAATTATATAGGG 1652

AAGGAGATTACAGCTTCCCCAGACTACCTGGAGATAGCCATTTACTGCATAGGGGTCTTC CAGGCCAACCAGTCTGCCTGGCTCACTGTCCTGCCAAAACAGCAAGCGCCTGGAAGAGAA 1431 1772

```
B &
                          В
                                   Qy
                                                 D
                                                           γQ
                                                                       ₽
                                                                                  Q
                                                                                                          Qy
                                                                                                Ъ
                                                                                                                        β
                                                                                                                                 δ
                                                                                                                                             В
                                                                                                                                                        γo
                                                                                                                                                                       В
                                                                                                                                                                              γo
                                                                                                                                                                                              DЬ
                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                   å.
                                                                                                                                                                                                                               γ
                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                              Qγ
                                                                                                                                                                                                                                                                                          DP QA
                                                                                                                                                                                                                                                                                                                 Вb
                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                   Ω
                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                           δõ
                                                                                                                                                                                                                                                                                                                                                                                         뫄
                                                                                                                                                                                                                                                                                                                                                                                                   γo
                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                            Š
               2452
                           2733
                                                 2673
                                                              2332
                                                                         2613
                                                                                                 2553
                                                                                                            2212
                                                                                                                        2493
                                                                                                                                               2433
                                                                                                                                                                                                          1972
                                                                                                                                                                                                                                  1912
                                                                                                                                                                                                                      2253
                                                                                                                                                                                                                                                         1852
                                                                                                                                                                                                                                                                                             2073
                                                                                                                                                                                                                                                                                                        1732
                                                                                                                                                                                                                                                                                                                     2013
                                                                                                                                                                                                                                                                                                                                           1953
                                                                                                                                                                                                                                                                                                                                                       1612
                                                                                                                                                                                                                                                                                                                                                                                          1833
                                                                                                                                                                                                                                                                                                                                                                                                                             1432
                                                                                                                                                                                                                                                                                                                                                                              1552
AACTGCACCAACGAACTGTACATGATGATGAGGGACTGTTGGCATGCAGTGCCCTCCCAG
                      GTCAAGTGGATGGCTCCAGAAGCCCTGTTTGATAGAGTATACACTCATCAGAGTGATGTC
                                                                                             ACCTACCAGCTGGCCAGAGGCATGGAGTACTTGGCTTCCCAAAAATGTATTCATCGAGAT
                                                                                                                                                                  GCCTCTAAAGGCAACCTCCGAGAATACCTCCGAGCCCGGAGGCCACCCGGGATGGAGTAC
                                                                                                                                                                                                                  ATCATAAATCTTCTTGGAGCCTGCACACAGGATGGGCCTCTCTATGTCATAGTTGAGTAT
                                                                                                                                                                                                                                          GACCTTTCTGATCTGGTGTCAGAGATGGAGATGATGAGATGATTGGGAAACACACAAGAAT
                                                                                                                                                                                                                                                                 CTGGGAGAAGGTTGCTTTGGGCAAGTGGTCATGGCGGAAGCAGTGGGAATTGACAAAGAC
                                                                                                                                                                                                                                                                                                                                                              CAGGTAACAGTTTCGGCTGAGTCCAGCTCCCATGAACTCCAACACCCCGCTGGTGAGG
                                                                                                                                                                                                                                                                                                                GAACTTCCAGAGGACCCAAAATGGGAGTTTCCAAGAGATAAGCTGACACTGGGCAAGCCC
                                                                                                                                                                                                                                                                                                                      GAACTTCCAGAGGACCCAAAATGGGAGTTTCCAAGAGATAAGCTGACACTGGGCAAGCCC
                                                                                                                                                                                                                                                                                                                                       ATAACAACACGCCTCTCTTCAACGGCAGACACCCCCATGCTGGCAGGGGTCTCCGAGTAT
                                                                                                                                                                                                                                                                                                                                                                                      CCAGACTTCAGCAGCCAGCCGGCTGTGCACAAAGCTGACCAAACGTATCCCCCTGCGGAGA
                                                                                                                                                                                                                                                                                                                                                                                                              2331
                                                                                              2612
                                                                                                         2271
                                                                                                                                 2211
                                                                      2672
                                                                                                                     2552
                                                                                                                                           2492
                                                                                                                                                        2151
                                                                                                                                                                    2432
                                                                                                                                                                               2091
                                                                                                                                                                                                                               1971
                                                                                                                                                                                           2372
                                                                                                                                                                                                       2031
                                                                                                                                                                                                                   2312
                                                                                                                                                                                                                                          2252
                                                                                                                                                                                                                                                      1911
                                                                                                                                                                                                                                                                  2192
                                                                                                                                                                                                                                                                             1851
                                                                                                                                                                                                                                                                                         2132
                                                                                                                                                                                                                                                                                                     1791
                                                                                                                                                                                                                                                                                                                            1731
                                                                                                                                                                                                                                                                                                                 2072
                                                                                                                                                                                                                                                                                                                                        2012
                                                                                                                                                                                                                                                                                                                                                    1671
                                                                                                                                                                                                                                                                                                                                                               1952
                                                                                                                                                                                                                                                                                                                                                                           1611
                                                                                                                                                                                                                                                                                                                                                                                       1892
                                                                                                                                                                                                                                                                                                                                                                                                  1551
```

```
Ş
                      Д
                                  ý
                                                       В
                                                                     δ
                                                                                          밁
                                                                                                       Qγ
                                                                                                                            밁
                                                                                                                                          γQ
                                                                                                                                                               밁
                                                                                                                                                                             οy
                                                                                                                                                                                                 밁
                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                  Q
                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                       KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                         BASE CO
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 14
AX481471
                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                              Query Match
Best Local
                                                                                                                                                                                                                                                                                                                  COUNT
                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3033
     694
                       361
                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2572
                                                                                           241
                                                                                                                             181
                                                                                                                                             454
                                                                                                                                                               121
                                                                                                                                                                                394
                                                                                                                                                                                                                   334
                                                                                                                                                                                                                                                    274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2512
                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                    / Match 57.8%;
Local Similarity 100.0%;
nes 2466; Conservative
                                                                                                                                                                                                                                    Н
                                                  GACTCCGGCCTCTATGCTTGTACTGCCAGTAGGACTGTAGACAGTGAAACTTGGTACTTC
GAAGATTTTGTCAGTGAGAACAGTAACAACAAGAGAGCACCATACTGGACCAACACAGAA
                                                                                    CGCTGCCTGTTGAAAGATGCCGCCGTGATCAGTTGGACTAAGGATGGGGTGCACTTGGGG
                                                                                                                                                         AAATACCAAATCTCTCAACCAGAAGTGTACGTGGCTGCGCCAGGGGAGTCGCTAGAGGTG
                                                                                                                                                                                            ATGGTCAGCTGGGGTCGTTTCATCTGCCTGGTCGTGGTCACCATGGCAACCTTGTCCCTG
                ATGGTGAATGTCACAGATGCCATCTCATCCGGAGATGATGAGGATGACACCGATGGTGCG
                          ATGGTGAATGTCACAGATGCCATCTCATCCGGAGATGATGAGGATGACACCGATGGTGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCATGCCTTCCTCAGTATCCACACATAAACGGCAGTGTTAAAACATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGAAGTTCTTGTTCAGGAGATGATTCTGTTTTTTCTCCAGACCCCATGCCTTACGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGACCAACGTTCAAGCAGTTGGTAGAAGACTTGGATCGAATTCTCACTCTCACAACCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX481471
Sequence 85
AX481471
AX481471.1
                                                                                                                                                                                                                                                                                                                                                                                                                       human.
Homo s
                                                                                                                                                                                                                                                                                                                                                          Kreutzer,R., Limmer,S., Rost,S. and Hadwiger,P. Method for inhibiting the expression of a target Patent: WO 02055693-A 85 18-JUL-2002; Ribopharma AG (DE)
                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; ;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                671
                                                                                                                                                                                                                                                                                                                                                                                                                        sapiens
                                                                                                                                                                                                                                                                                                                Ø
                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
/db_xref="taxon:9606"
604 c 656 g 53
                                                                                                                                                                                                                                                                                                                                          1. .2466
                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   from
                                                                                                                                                                                                                                                                                                                                                                                                                                                  GI:22316385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Patent
                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                  Score 2466; DI
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2466 bp
W002055693.
                                                                                                                                                                                                                                                                                                               535
                                                                                                                                                                                                                                                                                    DΒ
                                                                                                                                                                                                                                                                                                               4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA
                                                                                                                                                                                                                                                                                   6;
                                                                                                                                                                                                                                                                   0,
                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT
                                                                                                                                                                                                                                                                                                                                                                                                            Euteleostomi;
                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16-AUG-2002
                                                                                                                                                                                                                                                                 Gaps
753
                 420
                                  693
                                                    360
                                                                    633
                                                                                                        573
                                                                                                                                                                           453
                                                                                      300
                                                                                                                                                          180
                                                                                                                                                                                                              393
                                                                                                                                                                                                                              60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2571
                                                                                                                                                                                                                                                                 0
```

1833	774 GTGGGAATTGACAAAGACAAGCCCAAGGAGGCGGTCACCGTGGCCGTGAAGATGTTGAAA	Qy 1
1773 1500	714 CTGACACTGGGCAAGCCCCTGGGAGAAGGTTGCTTTGGGCAAGTGGTCATGGCGGAAGCA	Oy 1 Db 1
1713 1440	654 GCAGGGGTCTCCGAGTATGAACTTCCAGAGGACCCAAAATGGGAGTTTCCAAGAGATAAG	Oy 1 Db 1
1653 1380	594 AACAGCCCGCTGGTGAGGATAACAACACGCCTCTCTTCAACGGCAGACACCCCCATGCTG	Оу 1 Db 1
1593 1320	534 CGTATCCCCCTGCGGAGACAGGTAACAGTTTCGGCTGAGCTCCAGCTCCCATGAACTCC	0y 1 Db 1
1533 1260	474 AAGAACACGACCAAGAAGCCAGACTTCAGCAGCCGGCCGG	Qу 1 Db 1
1473 1200	414 TACTGCATAGGGGTCTTCTTAATCGĆCTGTATGGTGGTAACAGTCATCCTGTGCCGAATG	Oy 1 Db 1
1413 1140	354 CCAGCCCTGGAAGAGAAAAGGAGATTACAGCTTCCCCAGACTACCTGGAGATAGCCATT	Oy 1 Db 1
1353	294 ACGTGCTTGGCGGGTAATTCTATTGGGATATCCTTTCACTCTGCATGGTTGACAGTTCTG	Qy 1 Db 1
1293 1020	234 GACAAAGAGATTGAGGTTCTCTATATTCGGAATGTAACTTTTGAGGACGCTGGGGAATAT	Oy 1
1233 960	174 TACGGGCCCGACGGGCTGCCCTACCTCAAGGTTCTCAAGGCCGCCGGTGTTAACACCACG	Ď ¥
1173 900	114 TACAGTGATGCCCAGCCCCACATCCAGTGGATCAAGCACGTGGAAAAGAACGGCAGTAAA	Qу 1:
1113	54 GGACTGCCGGCAAATGCCTCCACAGTGGTCGGAGGAGACGTAGAGTTTGTCTGCAAGGTT	Qy 10
1053 780	94 AATCACACGTACCACCTGGATGTTGTGGAGCGATCGCCTCACCGGCCCATCCTCCAAGCC	Оу 9 Въ 7
993 720 ·	34 GTGGTCCCATCTGACAAGGGAAATTATACCTGTGTGGGGGAGAATGAAT	Qy 9
933	74 GAGCATCGCATTGGAGGCTACAAGGTACGAAACCAGCACTGGAGCCTCATTATGGAAAGT 	Оу 8
873 600	814 CCCGGGGGGAACCCAATGCCAACCATGCGGTGGCTGAAAAACGGGAAGGAGTTTAAGCAG 8	Οy 8 Db 5
913	54 AAGATGGAAAAGCGGCTCCATGCTGTGCCTGCGGCCAACACTGTCAAGTTTCGCTGCCCA 8	Qy 7 Db 4
08		Db 4

HU LO DE VE	oy Oy	dd VQ	Qy Qy	dg VQ	Qy Db	Oy da	Qy Db	0y	Qy Db	ФФ	Db Qy	Db Oy	Оy	Оу	Оу	Qy db	Db
RESULT 15 HUMTK14 LOCUS DEFINITIO ACCESSION VERSION	2734 2461	2674 2401	2614 2341	2554 2281	2494 2221	2434 2161	2374 2101	2314 2041	2254 1981	2194 1921	2134 1861	2074 1801	2014 1741	195 4 1681	1894 1621	1834 1561	1501
HUMTK14 2481 bp mRNA linear PRI 14-JAN-1995 N Human fibroblast growth factor receptor mRNA, complete cds. N M55614 M37715 M55614.1 GI:339710	ACATGA 2739 ACATGA 2466 .	GACCCCATGCCTTACGAACCATGCCTTCCTCAGTATCCACACATAAACGGCAGTGTTAAA 2733	CCTAGTTACCCTGACACAAGAAGTTCTTGTTCTTCAGGAGATGATTCTGTTTTTTCTCCA 26	CTCACTCTCACAACCAATGAGGAATACTTGGACCTCAGCCAACCTCTCGAACAGTATTCA 2613	CATGCAGTGCCCTCCCAGAGACCAACGTTCAAGCAGTTGGTAGAAGACTTGGATCGAATT 2553 	AGAATGGATAAGCCAGCCAACTGCACCAACGAACTGTACATGATGATGAGGGACTGTTGG 2493	GGCTCGCCTACCCAGGGATTCCCGTGGAGGAACTTTTTAAGCTGCTGAAGGAAG	ACTCATCAGAGTGATGTCTGGGTCCTTCGGGGTGTTAATGTGGGAGATCTTCACTTTAGGG 2373	ACCAATGGGCGGCTTCCAGTCAAGTGGATGGCTCCAGAAGCCCTGTTTGATAGAGTATAC 2313	AAAATAGCAGACTTTGGACTCGCCAGAGATATCAACAATATAGACTATTAGAAAAAGACC 2253	AAATGTATTCATCGAGATTTAGCAGCCAGAAATGTTTTGGTAACAGAAAACAATGTGATG 2193 	AAGGACTTGGTGTCATGCACCTACCAGCTGGCCAGAGGCATGGAGTACTTGGCTTCCCAA 2133 	CCACCCGGGATGGAGTACTCCTATGACATTAACCGTGTTCCTGAGGAGCAGATGACCTTC 2073	TATGTCATAGTTGAGTATGCCTCTAAAGGCAACCTCCGAGAATACCTCCGAGCCCGGAGG 2013	ATTGGGAAACACAAGAATATCATAAATCTTCTTGGAGCCTGCACACAGGATGGGCCTCTC 1953 	GATGATGCCACAGAGAAAGACCTTTCTGATCTGGTGTCAGAGATGATGAAGATGAAGATG 1893 	GTGGGAATTGACAAAGACAAGCCCAAGGAGGCGGTCACCGTGGCCGTGAAGATGTTGAAA 1560

```
οy
                                                                     DЬ
                                                                                            Qγ
                                                                                                                      Db
                                                                                                                                        δÃ
                                                                                                                                                                      В
                                                                                                                                                                                         Qy
                                                                                                                                                                                                                    뫄
                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                     BASE CO
                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
MEDLINE
PUBMED
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Sim
Matches 2472;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                 COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                         301
                                               562
                                                                        241
                                                                                                                         181
                                                                                                                                               442
                                                                                                                                                                       121
                                                                                                                                                                                                382
                                                                                                                                                                                                                                              322
                                                                                                                                                                                                                                                                                               262
                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                      ш
                  GCCACGCCTAGAGACTCCGGCCTCTATGCTTGTACTGCCAGTAGGACTGTAGACAGTGAA
                                                                                                                                                                                                                                                               GTACCGTAACCATGGTCAGCTGGGGTCGTTCATCTGCCTGGTCGTGGTCACCATGGCA 321
                                                                 GTGCACTTGGGGCCCCAACAATAGGACAGTGCTTATTGGGGAGTACTTGCAGATAAAGGGC
                                                                              GTGCACTTGGGGCCCAACAATAGGACAGTGCTTATTGGGGAGTACTTGCAGATAAAGGGC
                                                                                                                GAGCCACCAAATACCAAATCTCTCAACCAGAAGTGTACGTGGCTGCGCCAGGGGAG
                                                                                                                                                                           ACCTTGTCCCTGGCCCGGCCCTCCTTCAGTTTAGTTGAGGATACCACATTAGAGCCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 (bases 1 to 2481)
Houssaint, E., Blanquet, P.R., Champion-Arnaud, P.,
Torriglia, A., Courtois, Y. and Breathnach, R.
Related fibroblast growth factor receptor genes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ното
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TK14 prokinase.
                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human, cDNA to
                                                                                                                                                                                                                                                                                                                                                                                673
                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sapiens
                                                                                                                                                                                                                                                                                                                                                                          /Product="TKL4 protein"
/Product="TKL4 protein"
/Product="TKL4 protein"
/Product="TKL4 protein"
/Product="TKL4 protein"
/db_xref="G1:339711"
/translation="MYSMGRFICLVVVTMATLSLARPSFSLVEDTTLEPEEPPTKYQI
SQPEVYVAAPGESLEVRCLLKDAAVISWTKDGVHIGPNNRTVLIGEYLQIKGATPRDS
GLYACTASRTVDSETWYEMYNNTDAISGCDEDDTDGAEDFVSENSNNKRAPYWTNTE
KMEKRLHAVPAANTVKFRCPAGGNEMPTMRWLKNGKEFKOEHRIGGYKVRNQHWSLIM
ESVVPSDKGNYTCVVENEYGSINHTYHLDVVERSPHRPILQAGLPANASTVYGGOVEF
VCKYYSDAOPHIQWIKHYEKNGSKYGPDGLPYLKVLKAAGVNTTDKEIEVLYIRN
VTFEDAGEYTCLAGNSIGISFHAAWLTVLPAPGEKEITASPDYLEIAIYGIGVEF
VCKYYSDAOPHIQWIKHYEKNGSKYGPDGLPYLKVLKAAGVNTTDKEIEVLYIRN
VTFEDAGEYTCLAGNSIGISFHAAWLTVLPAPGEKEITASPDYLEIAIYGIGVEF
VCKYYSDAOPHIQWIKHTKREDESQPAVHKLTKRIPLKRGVSAESSSSMONNTPLIRITT
RLSSTADTPMLAGVSEYELPEDPKWEFPRDKLTIGKPLGEGCFGQVVMAEAVGIDKDK
PKEAVTVAVKMLKDDATTSKDLSDLVSEMSMKMIGKHKMIINLGACTODGPLYVIVE
YASKGHLREYLHARRPGEMEYSYDINKYDEEQMTFKDLVSCTYQLARGMEYLASQKCI
HRDLAARNVLVTENNVMKIADGSFYPGIFVEEQMTFKDLVSCHRMDKPANCTNELYMMRDC
FYSCONLWEIFTIGGSFYPGIFVEELFKLLKECHRMDKPANCTNELYMMRDC
FSPDPMPYEPCLPQYPHINGSVKT"

173 a 609 c 660 g 539 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Natl.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /codon_start=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /gene="fgf receptor"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Homo sapiens"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gene-"fgf receptor"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cell_
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Acad.
                                                                                                                                                                                                                                                                                                                               57.1%;
99.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  fibroblast
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            mRNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             type-"tumor"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sci. U.S.A.
                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                 Score 2437; [Pred. No. 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                growth factor receptor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Craniata; Vertebrata;
Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (20), 8180-8184
                                                                                                                                                                                                                                                                                                                                         DΒ
                                                                                                                                                                                                                                                                                                                                        9;
                                                                                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                                        Length 2481;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hominidae;
                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     exist in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (1990)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                protein-tyrosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gesnel, M.C.,
                                                                                                                                                                                                                                                                                                                15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo.
                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     the
                    360
                                                                                                                                         503
                                                                                                                                                                                        441
                                                                                                                                                                                                                  120
                                                                 300
                                                                                        561
                                                                                                                 240
                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                2
   δÃ
                            밁
                                                  Ş
                                                                                                Ş
                                                                            В
                                                                                                                          밁
                                                                                                                                                Ş
                                                                                                                                                                          밁
                                                                                                                                                                                             δ
                                                                                                                                                                                                                           Ъ
                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                         맑
                                                                                                                                                                                                                                                                                                                                               δõ
                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                        멍
                                                                                                                                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δÔ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                             1315
                                                                                                                                                    1513
                                                                                                                                                                           1201
                                                                                                                                                                                                                           1141
                                                                                                                                                                                                                                                                                                                          1021
                                                                                                                                                                                                                                                                                                                                                  1273
                                                                                                                                                                                                                                                                                                                                                                                                                                                 1162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1102
                                                                                                                                                                                                                                                                                                                                                                                                1213
                                                                                                                                                                                                                                                                                                                                                                                                                        901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               622
TGGGAGTTTCCAAGAGATAAGCTGACACTGGGCAAGCCCCTGGGAGAAGGTTGCTTTGGG
                     GCTGTGCACAAGCTGACCAAACGTATCCCCCTGCGGAGACAG-----GTTTCGGCTGAG
                                                                                                                                   GCTGTGCACAAGCTGACCAAACGTATCCCCCTGCGGAGACAGGTAACAGTTTCGGCTGAG
                                                                                                                                                                      TTTGAGGACGCTGGGGAATATACGTGCTTGGCGGGTAATTCTATTGGGATATCCTTTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTCTGCAAGGTTTACAGTGATGCCCAGCCCCACATCCAGTGGATCAAGCACGTGGAAAAG
                                                                                                                                                                                    TCTGCATGGTTGACAGTTCTGCCAGCGCCTGGAAGAGAAAAGGAGATTACAGCTTCCCCA
                                                                                                                                                                                                                                                                                 TCTGCATGGTTGACAGTTCTGCCAGCGCCTGGAAGAGAAAAGGAGATTACAGCTTCCCCA
                                                                                                                                                                                                                                                                                                                                                                                GCCGCCGGTGTTAACACCACGACAAAGAGATTGAGGTTCTCTATATTCGGAATGTAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TACGGGTCCATCAATCACACGTACCACCTGGATGTTGTGGAGCGATCGCCTCACCGGCCC
                                                                                                                                                                                                                                                                                                                                                                   GCCGCCGGTGTTAACACCACGGACAAAGAGATTGAGGTTCTCTATATTCGGAATGTAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                 ATCCTCCAAGCCGGACTGCCGGCAAATGCCTCCACAGTGGTCGGAGGAGAGACGTAGAGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTATGGAAAGTGTGGTCCCATCTGACAAGGGAAATTATACCTGTGTGGTGGAGAATGAA
                                                                                                                                                                                                                                                                                                                                                                                                                    AACGGCAGTAAATACGGGCCCGACGGGCTGCCCTACCTCAAGGTTCTCAAGGTTCTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAGTTTAAGCAGGAGCATCGCATTGGAGGCTACAAGGTACGAAACCAGCACTGGAGCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAGTTTAAGCAGGAGCATCGCATTGGAGGCTACAAGGTACGAAACCAGCACTGGAGGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTTCGCTGCCCAGCCGGGGGAACCCAATGCCATGCGGTGGCTGAAAAACGGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCAACACAGAAAAGATGGAAAAGCGGCTCCATGCTGTGCCTGCGGGCCAACACTGTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCGATGGTGCGGAAGATTTTGTCAGTGAGAACAGTAACAAGAAGAGAGACACCATACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACTTGGTACTTCATGGTGAATGTCACAGATGCCATCTCATCCGGAGATGATGATGACGATGACGATGACGATGTGATGACTATCCGGAGATGATGACGATGACGATGATGACTCATCCGGAGATGATGATGACGATGACGATGACGATGACCTCATCCGGAGATGATGATGAGATGAC
                                               1692
                                                                      1374
                                                                                              1632
                                                                                                                      1314
                                                                                                                                               1572
                                                                                                                                                                                                                     1200
                                                                                                                                                                       1260
                                                                                                                                                                                             1512
                                                                                                                                                                                                                                              1452
                                                                                                                                                                                                                                                                                            1392
                                                                                                                                                                                                                                                                                                                                                                     1020
                                                                                                                                                                                                                                                                                                                                                                                          1272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1101
                                                                                                                                                                                                                                                                                                                     1080
                                                                                                                                                                                                                                                                                                                                                                                                                                          1212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1041
                                                                                                                                                                                                                                                                                                                                                                                                                   960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         681
```

```
рь
                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                  Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ₽
                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                        Q
                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                        Вb
                                                                                                                                                                                                                                                                                                                                                   9
                                                                                                                                                                                                                                                                                                                                                                                             Вb
                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                             Q
                                                                                                                                                                                                           망
                                                                                                                                                                                                                     Š
                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                              ₽
                                                                                                               õ
                                                                                                                                         Ş
                                                                                                                                                       рь
                                                                                                                                                                  Š
                                                                                                                                                                                 В
밁
           δ
                        В
                                    Ş
                                                рь
                                                            Q
                                                                           Ф
                                                                                    Ş
                                                                                                    ₽
                                                                                                                               В
                                                                                                                                                                                                                                                                                                                 1735
                                                                                                                                                                                                                                                                                                                                                       1933
                                                                                                                                                                                                                                                                                                                                                                     1615
                                                                                                                                                                                                                                                                                                                                                                                                          1813
                                                                                                                                                                                                                                                                                                                                                                                                                                    1753
                                                                                                                                                                                                                                                                                                                                                                                                                                                 1435
                                                                                                                                                                                 2035
                                                                                                                                                                                                                                     1915
                                                                                                                                                                                                                                                  2173
                                                                                                                                                                                                                                                               1855
                                                                                                                                                                                                                                                                           2113
                                                                                                                                                                                                                                                                                        1795
                                                                                                                                                                                                                                                                                                     2053
                                                                                                                                                                                                                                                                                                                             1993
                                                                                                                                                                                                                                                                                                                                          1675
                                                                                                                                                                                                                                                                                                                                                                                 1873
                                                                                                                                                                                                                                                                                                                                                                                              1555
                                                                                                                                                                                                                                                                                                                                                                                                                       1495
                                                                            2275
                                                                                                     2215
                                                                                                                                            2413
                                                                                                                                                                      2353
                                                                                                                                                                                               2293
                                                                                                                                                                                                           1975
                                                                                                                                                                                                                        2233
                                                                                                                                                         2095
2455
                                                                                                                                                                                                                                                                                                                                                                                                                       TGCACACAGGATGGGCCTCTCTATGTCATAGTTGACTATGCCTCTAAAGGCAACCTCCGA 1992
                                                                                                                                                                                                                                                                                                                                                                    GAGATGGAGATGAAGATGATTGGGAAACACAAGAATATCATAAATCTTCTTGGAGCC
                                                  CAACCTCTCGAACAGTATTCACCTAGTTACCCTGACACAAGAAGTTCTTGTTCTTCAGGA
                                                                           GAATACCTCCGAGCCCGGAGGCCACCCGGGATGGAGTACTCCTATGACATTAACCGTGTT 2052
                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGGGAGTTTCCAAGAGATAAGCTGACACTGGGCAAGCCCCTGGGAGAAGGTTGCTTTGGG
                                                                                                                               GCCCTGTTTGATAGAGTATACACTCATCAGAGTGATGTCTGGTCCTTCGGGGTGTTAATG 2352
                                                                                                                                                                                                                                                                                                                 GAATACCTCCGAGCCCGGAGGCCACCCGGGATGGAGTACTCCTATGACATTAACCGTGTT
             CACATAAACGGCAGTGTTAAAACATGA 2739
                          GATGATTCTGTTTTTTCTCCAGACCCCATGCCTTACGAACCATGCCTTCCTCAGTATCCA
                                GATGATTCTGTTTTTTCTCCCAGACCCCATGCCTTACGAACCATGCCTTCCTCAGTATCCA
                                                                                                      ATGATGATGAGGGACTGTTGGCATGCAGTGCCCTCCCAGAGACCCAACGTTCAAGCACTTG
                                                                                                                                                                                   CCCCTGTTTGATAGAGTATACACTCATCAGAGTGATGTCTGGTCCTTCGGGGGTGTTAATG
CACATAAACGCCAGTGTTAAAACATGA
                                                                                                                                                                                                                                                                                                                  1794
                                                                                                                                                                                                                                                                                                                                                                     1674
                                                                                                                                                                                                                                                                                                                                                                                  1932
                                                                                                                                                                                                                                                                                                                                                                                                                         1554
                                                                                                                                                                                                                                                                                                                                                                                                                                     1812
                                                                                                                                                                      2412
                                       2712
                                                                 2652
                                                                                                                                            2472
                                                                                                                                                          2154
                                                                                                                                                                                   2094
                                                    2394
                                                                             2334
                                                                                                      2274
                                                                                                                   2532
                                                                                                                                 2214
                          2454
                                                                                          2592
```

Job time : 7248 secs

Search completed: December 11, 2002, 16:33:47

Copyright

GenCore version (c) 1993 - 2002

5.1.3 Compugen Ltd

```
Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Run
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               옻
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            nucleic -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   nucleic search, using sw model
           IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 December 11, 2002, 12:52:46; Search time 550 Seconds (without alignments) 17475.507 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-954-556-3
4268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2185239 seqs, 1125999159 residues
: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1980.DAT:*
2: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1981.DAT:*
2: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1981.DAT:*
2: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1982.DAT:*
3: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1983.DAT:*
3: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1985.DAT:*
3: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1986.DAT:*
3: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1986.DAT:*
3: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1989.DAT:*
4: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1989.DAT:*
5: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1990.DAT:*
2: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1991.DAT:*
4: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1993.DAT:*
5: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1993.DAT:*
5: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1993.DAT:*
6: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1993.DAT:*
5: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1994.DAT:*
6: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1995.DAT:*
7: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1997.DAT:*
9: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1997.DAT:*
9: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1997.DAT:*
5: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1997.DAT:*
5: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1997.DAT:*
5: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1997.DAT:*
5: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA2000.B.DAT:*
5: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA2000.B.DAT:*
7: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA2000.B.DAT:*
7: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA2000.B.DAT:*
7: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA2000.B.DAT:*
7: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA2000.B.DAT:*
7: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA2000.B.DAT:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4370478
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

51.3 2676 12 AAQ14850	79.2 3416 13 AAQ21004 62.6 3244 24 ABL61834 57.8 2466 24 ABL91742	8 100.0 4268 24 ABL64983 8 100.0 4268 24 ABL66289 9 100.0 4268 24 ABL68994	Length DB ID
Clone pTB1229 enco	bek receptor prote Colon adenocarcino Human polynucleoti Clone pTB1284 enco	Lung cancer relate Lung cancer relate Kidney Cancer rela	Description

45	44	43	42	41	40	39	38	37	ω 6	G G	4	w	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	J.	12	11	10
Ç.	ŗ	.5	.5	895.6	·	.51	Ņ	.5	. 55	. 7	-	5		0	.0	-	_	7	1	1141		159	116	7	1182.2	182	182	188	276	276	318	367	7	642	642
•	•	•	•	•	•	•	•	•	•							•		•				•			27.7										
4	2	4	2427	•	2427	2427	42	2427	42	42	97	80	24	82	82	99	42	85	32	50	52	73	99	72	3525	6	6	ω	89	39	9	67	67	34	3
22	22	22	22	22	22	22	22	22	22	22	12	23	23	24	24	23	24	12	13	19	24	17	13	21	13	24	12	20	20	19	12	20	19	12	12
44	442	441	AAA54418	AAA54417	AAA54416	AAA54415	AAA54414	AAA54412	AAA54406	AAA54423	AAQ14846	AAD34802	AAD21622	ABL68525		AAD34801	ABL91743	AAQ10448	AAQ20914	AAV44041	ABA01689	AAT31051	AAQ21003	AAF18252	AA027658	ABL91728	AA013311	AAX87179	AAX85616	AAV19078	AAQ14848		AAV19076	1086	AAQ14049
t (G382	t (N542K)	t (N542K)	t (X809L)	t (X809G)	(X809G)	(X809G)	(X809C)	(Y375C)	last growt	(G377C)	es extracell	fibroblas	fibroblast	y cancer rel		fibroblast	polynu	basic	bFGF	(P)	fibroblast	n fibrobl	receptor prot	o cancer a	N-sam chan Homo		9 6	,	keratinosyte	eratinocyte	e nTR1228	9	ö	eceptor gana	Human ect gene. H

ALIGNMENTS

```
RESULT 1
ABL64983
ID ABL6
    05-JUN-2000,
05-JUN-2000,
18-SEP-2000,
18-SEP-2000,
20-SEP-2000,
20-SEP-2000,
20-SEP-2000,
22-SEP-2000,
22-SEP-2000,
                                                                                                                                                                                                Human; cancer; colon; breast; ovary; oesophagus; kidney; thyroid; stomach; lung; prostate; pancreas; carcinoma; antitumour; cancerous; cytostatic; gene therapy; antineoplastic; Wilm's tumour; adenocarcin
                                                                                                       30-MAY-2001;
                                                                                                                            13-DEC-2001.
                                                                                                                                                WO200194629-A2
                                                                                                                                                                                                                                          Lung cancer related gene sequence
                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                       ABL64983;
                                                                                                                                                                                                                                                                                                         ABL64983 standard; DNA;
                                                                                                                                                                                                                                                              15-MAY-2002 (first entry)
2000US-209473P.

2000US-209531P.

2000US-233133P.

2000US-233617P.

2000US-234009P.

2000US-234034P.

2000US-23453P.

2000US-23453P.

2000US-234567P.
                                                                                                       2001WO-US10838
                                                                                                                                                                                                                                                                                                          4268
                                                                                                                                                                                                                                                                                                         ВÞ
                                                                                                                                                                                                                                           SEQ ID NO: 3320
                                                                                                                                                                                                 tumour; adenocarcinoma;
```

2000US-234923P. 2000US-234924P. 2000US-235077P. 2000US-235082P.

```
ş
                                                                                                                 The present invention describes a method (M1) for screening for an anti-neoplastic agent. The method involves exposing cells to a chemical cagent to be tested for anti-neoplastic activity, determining a change in cagent to be tested for anti-neoplastic activity, determining a change in comprises a sequence (S) selected from 8447 sequences (given in ABL6164 cc to ABL70110), or is at least 95% identical to (S), where a change in capression is indicative of anti-neoplastic activity. (I) has cytostatic activity and can be used in gene therapy. M1 can be used for screening can anti-neoplastic agent, and can be used for producting a product which is the data collected with respect to the anti-neoplastic agent as a cresult of M1, and the data is sufficient to convey the chemical consulture and/or properties of the agent. M1 can be used in the creatment of cancer such as colon, breast, stomach, lung, thyroid, cossophageal, ovarian, kidney, prostate or pancreatic cancer, infiltrating ductal cancer, squamous cell carcinoma, neuroendocrine carcinoma, papillary carcinoma and wilm's tumour.
                                        Query Ma
Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25-SEP-2000;

25-SEP-2000;

25-SEP-2000;

25-SEP-2000;

25-SEP-2000;

26-SEP-2000;

27-SEP-2000;

27-SEP-2000;

27-SEP-2000;

27-SEP-2000;

27-SEP-2000;

28-SEP-2000;

28-SEP-2000;

29-SEP-2000;

28-SEP-2000;

29-SEP-2000;

29-SEP-2000;

29-SEP-2000;

20-CCT-2000;

02-CCT-2000;

02-CCT-2000;

03-CCT-2000;

03-CCT-2000;
                                                                                                                                                                                                                                                                                                                                                                 Claim
                                                                                                                                                                                                                                                                                                                                                                                           Screening for anti-neoplastic agent involves exposing cell chemical agent to be tested for anti-neoplastic activity, determining a change in expression of a gene of a signature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (AVAL-) AVALON PHARM.
                                                                                              Sequence
                                                                   Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 T PE,
DR,
               CCCAAGGACCACTCTTCTGCGTTTGGAGTTGCTCCCCACAACCCCGGGCTCGTCGCTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                 2002-188264/24
                                                                                                                                                                                                                                                                                                                                                                   1;
Similarity
                                                                                                                                                                                                                                                                                                                                                                   SEQ
                                                                                               4268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Augustus
Weaver 2
                                     100.0%;
nilarity 100.0%;
Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2000US - 236109P
2000US - 236842P
2000US - 236891P
2000US - 237173P
2000US - 237173P
2000US - 237278P
2000US - 237278P
2000US - 237294P
2000US - 237294P
2000US - 237316P
2000US - 237316P
2000US - 237504P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2000US-235082P
2000US-235134P
2000US-235280P
2000US-235637P
2000US-235731P
2000US-235711P
2000US-235712P
2000US-235720P
2000US-235843P
2000US-235863P
2000US-235863P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2000US-236034P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2000US-236032P.
2000US-236033P.
                                                                                                                                                                                                                                                                                                                                                                   ID 3320;
                                                                                               BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Z ;
                                                                                              1199 A;
                                                                                                                                                                                                                                                                                                                                                                44pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Carter
                                                                                               964
                                                                                                                                                                                                                                                                                                                                                                   English.
                                          0;
                                                        Score 4268;
Pred. No. 0
                                                                                              C; 1028 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         č,
                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ebner
                                                        0,
                                                                                               1077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ₹
                                                                      В
                                                                                              Τ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Endress
                                           0;
                                                                    24;
                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                             signature
                                           Indels
                                                                   Length
                                                                                               other;
                                                                                                                                                                                                                                                                                                                                                                                                                       cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                           ls to
and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Horrigan
                                                                                                                                                                                                                                                                                                                                                                                               gene
                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                        Ø
                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                set
                   60
                                            0;
```

```
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                         20
                                                                                                                                                                                  Ş
                                                                                                                                                                                                                           δõ
                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                     Š
                                                                                                                                                                                                                                                                                                                                                                             ₽
                                                                                                                                                                                                                                                                                                                                                                                            δõ
                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
 밁
              δ
                                        밁
                                                       ν
                                                                                멍
                                                                                                  Ş
                                                                                                                        В
                                                                                                                                                                 밁
                                                                                                                                                                                                           밁
 1081
                    1081
                                         1021
                                                                                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                         109
                                                                                                                                                                                                                                                                                                                                                                              541
                                                                                                                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                      841
                                                                                                                                                                                                                                                                                             661
                                                                                                                                                                                                                                                                                                                 661
                                                                                                      961
                                                                                                                          901
                                                                                                                                               901
                                                                                                                                                                    841
                                                                                                                                                                                                           781
                                                                                                                                                                                                                               781
                                                                                                                                                                                                                                                     721
                                                                                                                                                                                                                                                                       721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                             TACCTGGCTGCGCCAGGGGAGTCGCTAGAGGTGCGCTGCTGTTGAAAGATGCCGCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GATACCACATTAGAGCCAGAAGAGCCACCAACCAAATACCAAATCTCTCAACCAGAAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGTGACTGCAGCAGCAGCGGCAGCGCCTCGGTTCCTGAGCCCACCGCAGGCTGAAGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCCATCCCGACCCACGCGGGGCCGCGGGGACAACACACGCTCGCGGAGGAGCGTTGCCATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCCAAGGACCACTCTTCTGCGTTTGGAGTTGCTCCCCACAACCCCGGGCTCGTCGCTTTC
                                                                                                                                                                                                                                                                                                                                                                             CTGGTCGTGGTCACCATGGCAACCTTGTCCCTGGCCCGGCCCTCCTTCAGTTTAGTTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGGTCGTGGTCACCATGGCAACCTTGTCCCTGGCCCGGCCCTCCTTCAGTTTAGTTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TATGGAAGAGGACCGGGGATTGGTACCGTAACCATGGTCAGCTGGGGTCGTTTCATCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTGCGCGTAGTCCATGCCCGTAGAGGAAGTGTGCAGATGGGATTAACGTCCACATGGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCCATCCCGACCCACGCGGGGCGCGGGGACACACACGTCGCGGAGGAGCGTTGCCATTC
                                                                                                                                                                                                          CCTGCGGCCAACACTGTCAAGTTTCGCTGCCCAGCCGGGGGGAACCCAATGCCAACCATG
                                                                                                                                                                                                                                                  AACAAGAGAGCACCATACTGGACCAACACAGAAAAGATGGAAAAGCGGCTCCATGCTGTG
                                                                                                                                                                                                                                                                                                      TCCGGAGATGATGAGGATGACACCGATGGTGCGGAAGATTTTGTCAGTGAGAACAGTAAC
                                                                                                                                                                                                                                                                                                                                               AGTAGGACTGTAGACAGTGAAACTTGGTACTTCATGGTGAATGTCACAGATGCCATCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                      ATCAGTTGGACTAAGGATGGGGTGCACTTGGGGCCCCAACAATAGGACAGTGCTTATTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TATGGAAGAGGACCGGGGATTGGTACCGTAACCATGGTCAGCTGGGGTCGTTTCATCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTGCGCGTAGTCCATGCCCGTAGAGGAAGTGTGCAGATGGGGATTAACGTCCACATGGAGA
                                                                                                                                      CGAAACCAGCACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCTGACAAGGGAAATTAT
                                                                                                                                                                              CGGTGGCTGAAAAACGGGAAGGAGTTTAAGCAGGAGCATCGCATTGGAGGCTACAAGGTA
GAGCGATCGCCTCACCGGCCCATCCTCCAAGCCGGACTGCCGGCAAATGCCTCCACAGTG
                                                                                ACCTGTGTGGTGGAGAATGAATACGGGTCCATCAATCACACGTACCACCTGGATGTTGTG
                                                                                                                           CGAAACCAGCACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCTGACAAGGGAAATTAT
                                                                                                                                                                   CGGTGGCTGAAAAACGGGAAGGAGTTTAAGCAGGAGCATCGCATTGGAGGCTACAAGGTA
                                                                                                                                                                                                                                                                                            TCCGGAGATGATGAGGATGACACCGATGGTGCGGAAGATTTTGTCAGTGAGAACAGTAAC
                                                                                                                                                                                                                                                                                                                                     AGTAGGACTGTAGACAGTGAAACTTGGTACTTCATGGTGAATGTCACAGATGCCATCTCA
                   GTCGGAGGAGACGTAGAGTTTGTCTGCAAGGTTTACAGTGATGCCCAGCCCCACATCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
                      1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                            1080
                                                                1080
                                                                                     1020
                                                                                                       1020
                                                                                                                                                                                                                                                                                                                                                          660
                                                                                                                                                                                                                                                                                                                                                                                                                        540
                                                                                                                                                                                                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                             960
                                                                                                                                                                     900
                                                                                                                                                                                          900
                                                                                                                                                                                                              840
                                                                                                                                                                                                                                  840
                                                                                                                                                                                                                                                      780
                                                                                                                                                                                                                                                                         780
                                                                                                                                                                                                                                                                                              720
                                                                                                                                                                                                                                                                                                                   720
                                                                                                                                                                                                                                                                                                                                        660
                                                                                                                                                                                                                                                                                                                                                                                600
                                                                                                                                                                                                                                                                                                                                                                                                    600
```

1141

1141

	GAAATGTTTTGGTAACAGAAAACAATGTGATGAAAATAGCAGACTTTGGACTCGCCAGA 2220 	GGCCAGAGGCATGGAGTACTTGGCTTCCCAAAAATGTATTCATCGAGATTTAGCAGCC 2160 	ATTAACCGTGTTCCTGAGGAGCAGATGACCTTCAAGGACTTGGTGTCATGCACCTACCAG 2100	GGCAACCTCGGAGAATACCTCCGAGCCCGGAGGCCACCGGGATGGAGTACTCCTATGAC 2040 	CTTCTTGGAGCCTGCACACAGGATGGGCCTCTCTATGTCATAGTTGAGTATGCCTCTAAA 1980 	ATCTGGTGTCAGAGATGGAGATGAAGATGATGAGTGGGAAACACAAGAATATCATAAAT 1920 	GAGGCGGTCACCGTGGCCGTGAAGATGTTGAAAGATGATGCCACAGAGAAAGACCTTTCT 1860 	GGTTGCTTTGGGCAAGTGGTCATGGCGGAAGCAGTGGGAATTGACAAAGACAAGCCCAAG 1800 	GAGGACCCAAAATGGGAGTTTCCAAGAGATAAGCTGACACTGGGCAAGCCCCTGGGAGAA 1740 	CGCCTCTCTTCAACGGCAGACACCCCCATGCTGGCAGGGGTCTCCGAGTATGAACTTCCA 1680	GTTTCGGCTGAGTCCAGCTCCTCCATGAACTCCAACACCCCGCTGGTGAGGATAACAACA 1620 	AGCAGCCAGCCGGCTGTGCACAAGCTGACCAAACGTATCCCCCTGCGGAGACAGGTAACA 1560	CCAAGAAGCO CCAAGAAGCO	<u> </u>	NGAGAAAAGGAGATT 13 NGAGAAAAGGAGATT 13	TATT	AAGGTTCTCAAGGCCGCGGTGTTAACACCACGGACAAAGAGATTGAGGTTCTCTATATT 1260 	TGGATCAAGCACGTGGAAAAGAACGGCAGTAAATACGGGCCCGACGGGCTGCCCTACCTC 1200
_										<u></u>	·.							
Qy 3	Оу 3 Db 3	. D _D	Db Qy		р Q		Оy	ру	Оy	Qy		Оy	Оy	ОУ	Оy	Db Qy	pb Qy	Оy
3301 GAGGTGGAAAAATACTTTTGCTTTCAGGGAAAATGGTATAACGTTAATTTATTAATAAAT 3360	3241 TITTAATAGCTATTTGCTAAATGCTGTTCTTACACATAATTTCTTAATTTTCACCGAGCA 3300 	3181 TATTTTTTGTATTGAATTTAAATGGATGTCCCAATGCACCTAGAAAATTGGTCTCTCTTT 3240 	3121 TGGATGTATGTAAATATATTCAAATTATGTATAAATATATAT	61 TAATTO	3001 GCTGTGGACCAGTAGGACTCAAGGTGGACGTGCGTTCTGCCTTCCTT	2941 TCTGGAGCAGTGGACTGCCACAAGCCACCATGTAACCCCTCTCACCTGCCGTGCGTTCTG 3000	2881 TATGTGTAAAGATTTATACAGTTGAAAACTTGTAATCTTCCCCAGGAGGAGAAGAAGATT 2940 	2821 TTGTTGTCTCCACTTGTATATATGGATCAGAGGAGTAAATAATTGGAAAAGTAATCAGCA 2880 	2761 CAAACAGGACAGCACTGGGAACCTAGCTACACTGAGCAGGGGAGACCATGCCTCCCAGAGG 2820 	2701 CCTCAGTATCCACACATAAACGGCAGTGTTAAAACATGAATGA	2641 TGTTCTTCAGGAGATGATTCTGTTTTTTTCTCCAGACCCCATGCCTTACGAACCATGCCTT 2700	2581 TTGGACCTCAGCCAACCTCTCGAACAGTATTCACCTAGTTACCCTGACACAAGAAGTTCT 2640	2521 TTCAAGCAGTTGGTAGAAGACTTGGATCGAATTCTCACTCTCACAACCAATGAGGAATAC 2580 	2461 AACGAACTGTACATGATGATGAGGGACTGTTGGCATGCAGTGCCCTCCCAGAGACCAACG 2520	2401 GAGGAACTITTTAAGCTGCTGAAGGAAGGACACAGAATGGATAAGCCAGCC	2341 GGGTGTTAATGTGGGAGATCTTCACTTTAGGGGGCTCGCCCTACCCAGGGATTCCCCGTG 2400	2281 ATGGCTCCAGAAGCCCTGTTTGATAGAGTATACACTCATCAGAGTGATGTGTTCTGGTCCTTC 2340	2221 GATATCAACAATATAGACTATTACAAAAAAGACCACCAATGGGCGGCTTCCAGTCAAGTGG 2280

QΥ Вþ Ş В γQ В

1681

1621

1621 1561 1561 1501 1501 1441 1441 1381

밁

1741 1741 1681

1801

1861 1801

1861

Qγ

밁 Qy 망 οy 멍 δÃ В Q 밁 Qy 밁 δÃ В Ş

> 1321 1321

1261 1261 1201 1201

1381

δ В δÃ 밁 δÃ B δÃ В Qy 망 Q В δõ

2161 2101 2101 2041 2041 1981 1981 1921 1921

2161

```
RESULT 2
ABL66289
ID ABL6
XX
AC ABL6
                                                                                                                                                                                                                                                                                         рь
                                                                                                                                                                                                                                                                                                    õ
                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                         망
                                                                                                                                                                          Вb
                                                                                                                                                                                      Ş
                                                                                                                                                                                                  밁
                                                                                                                                                                                                           9
                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                             Š
                                                                                                                   Ş
                                                                                                                                         Ş
                                                                                                                                                     В
                                                                                                                                                               Š
                                                            g
                                                                       Š
                                                                                    밁
                                                                                              á
                                                                                                          Вþ
                                                                                                                                밁
                                        망
                                                δ
                                                                                                                                                                                                                         3781
                                                                                                                                                                                                                                                         3721
                                                                                                                                                                                                                                                                                          3601
                                                                                                                                                                                                                                                                                                     3601
                                                                                                                                                                                                                                                                                                                 3541
                                                                                                                                                                                                                                                                                                                           3541
                                                                                                                                                                                                                                                                                                                                       3481
                                                                                                                                                                                                                                                                                                                                                  3481
                                                                                                                                                                                                                                                                                                                                                             3421
                                                                                                                                                                                                                                                                                                                                                                        3421
                                                                                                                                                                                                                                                                                                                                                                                   3361
                                                                                                                                                                                                                                                                                                                                                                                              3361
                                                                                                                                                                                                                                                                                                                                                                                                          3301
                                                                                                                                           4021
                                                                                                                                                                            3901
                                                                                                                                                                                       3901
                                                                                                                                                                                                  3841
                                                                                                                                                                                                              3841
                                                                                                                                                                                                                                    3781
                                                                                                                                                                                                                                               3721
                                                                                                                                                                                                                                                                     3661
                                                                                                                                                                                                                                                                               3661
                                                                        4201
                                                                                               4141
                                                                                                          4081
                                                                                                                     4081
                                                                                                                                 4021
                                                                                                                                                      3961
                                                                                                                                                                 3961
ABL66289;
           ABL66289 standard;
                                                                                                                                                                                                                                                                                                                                                            TTGTGTTTAAATGCTGCTGTCAGACGATTGTTCTTAGACCTCCTAAATGCCCCATATTAA
                                                                                                                                                                                                                                                                                                                                      TTTGAAAAGAGAATATTTACAATATATGACTAATTTGGGGAAAATGAAGTTTTGATTTAT
                                                                                                                               GCTGGCCTTCTGCTTCTGAGTTGCACATTAATCAGATTAGCCTGATTCTCTTCAGTGAAT
                                                                                                                                                                                                                                                                                                 AAGAACTCATTCATAGGAAGGTGTTTCATTTTGGTGTGCAACCCTGTCATTACGTCAACG
                                                                                   AAACACCCACTCACTTTGCAATAGCCGTGCAAGATGAATGCAGATTACACTGATCTTATG
                                                                                                                                                                                   TCATAGAAAATTGAAACACAGAGTTGTTCTGCTGATAGTTTTGGGGATACGTCCATCTTT 3960
                                                                                                                                                                                                                                                                                           AAGAACTCATTCATAGGAAGGTGTTTCATTTTGGTGTGCAACCCTGTCATTACGTCAACG
                                        AAAAAAA
                                                  AAAAAAA 4268
                                                              TCATAGAAAATTGAAACACAGAGTTGTTCTGCTGATAGTTTTGGGGGATACGTCCATCTTT
           DNA; 4268
             48
                                                                                                                                                                                                                          3840
                                                                                                                                                                                                                                    3840
                                                                                                                                                                                                                                                                                                      3660
                                                                                                                                                                                                                                                                                                                  3600
                                                                                                                                                                                                                                                                                                                                        3540
                                                                                                                                                                                                                                                                                                                                                              3480
                                                                                                                                                                                                                                                                                                                                                                         3480
                                                                                                                                                                                                                                                                                                                                                                                    3420
                                                                                                                                                                                                                                                                                                                                                                                                           3360
                                                                          4260
                                                                                                                                 4080
                                                                                                                                            4080
                                                                                                                                                       4020
                                                                                                                                                                  4020
                                                                                                                                                                             3960
                                                                                     4200
                                                                                                          4140
```

```
05-JUN-2000

18-SEP-2000

18-SEP-2000

20-SEP-2000

20-SEP-2000

20-SEP-2000

25-SEP-2000

25-SEP-2000

25-SEP-2000

25-SEP-2000

25-SEP-2000

26-SEP-2000

26-SEP-2000

27-SEP-2000

28-SEP-2000

29-SEP-2000

20-SEP-2000

20-SEP-2000

20-SEP-2000

20-SEP-2000

20-SEP-2000

20-SEP-2000

20-SEP-2000

20-SEP-2000

20-SE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cytostatic;
gene; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200194629-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   stomach;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-MAY-2001;
                                                                                                                                                                                                (AVAL-) AVALON PHARM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cancer related gene sequence
                                                                                                                                           PE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cancer; colon; breast; ovary; oesophagus; kidney; thyrold;
h; lung; prostate; pancreas; carcinoma; antitumour; cancerous;
atic; gene therapy; antineoplastic; Wilm's tumour; adenocarcinoma;
                                                                                                                                           Augustus
Weaver Z
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2000US-235082P
2000US-235134P
2000US-235280P
2000US-235637P
2000US-235637P
2000US-235711P
2000US-235720P
                                                                                                                                                                                                                                  2000US-236028P
2000US-236032P
2000US-236034P
2000US-2361119P
2000US-236111P
2000US-236111P
2000US-23642P
2000US-237173P
2000US-237173P
2000US-237173P
2000US-237173P
2000US-237173P
2000US-237316P
2000US-237316P
2000US-237548P
2000US-237548P
2000US-237548P
2000US-237548P
2000US-237504P
2000US-237504P
2000US-237604P
2000US-237604P
2000US-237606P
2000US-237606P
2000US-237606P
2000US-237606P
2000US-237606P
2000US-237606P
2000US-237608P
2000US-237608P
2000US-237608P
2000US-237608P
2000US-237608P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2000US-234509P.
2000US-234509P.
2000US-234567P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2001WO-US10838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2000US-234924P.
2000US-235077P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000US-233133P.
2000US-233617P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2000US-235840P.
2000US-235863P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2000US-234923P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2000US-234009P.
2000US-234034P.
                                                                                                                                     , Z
                                                                                                                                                                <u>გ</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ
                                                                                                                                                                Ebner
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NO:4626
                                                                                                                                                                ,70
,
                                                                                                                                                                  Endress
                                                                                                                                                                ŝ
                                                                                                                                                                Horrigan
```

Screening for anti-neoplastic agent involves exposing cells to a chemical agent to be tested for anti-neoplastic activity, and determining a change in expression of a gene of a signature gene

set

2002-188264/24.

Claim 1;

IJ

44pp;

```
Qy
                                                                                                                                              Q
                                                               밁
                                                                                                                   В
                                                                                                                                                                               В
                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                                                                                                         γΩ
                                                                                                                                                                                                                                                                                                  망
                                                                                                                                                                                                                                                                                                                                                           ₽
                                                                                                                                                                                                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            #355555555555555555555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention describes a method (M1) for screening for an C anti-neoplastic agent. The method involves exposing cells to a chemical agent to be tested for anti-neoplastic activity, determining a change in CC expression of at least one gene (I) of a signature gene set, where (I) CC comprises a sequence (S) selected from 8447 sequences (given in ABL61644 CC to ABL70110), or is at least 95% identical to (S), where a change in CC expression is indicative of anti-neoplastic activity. (I) has cytostatic CC activity and can be used in gene therapy. M1 can be used for screening CC anti-neoplastic agent, and can be used for producing a product which can anti-neoplastic agent as a CC result of M1, and the data is sufficient to convey the chemical CC structure and/or properties of the agent. M1 can be used in the CC treatment of cancer such as colon, bereast, stomach, lung, thyroid, CC adenocarcinoma, carcinoma, clear cell cancer, infiltrating ductal cancer, CC infiltrating lobular cancer, squamous cell cancer, infiltrating ductal cancer, carcinoma, namillary carcinoma and with 's timen'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches 4268;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 4268 BP; 1199 A; 964 C; 1028 G; 1077 T; 0
       661
                                                               601
                                                                                            601
                                                                                                                       541
                                                                                                                                                   541
                                                                                                                                                                                481
                                                                                                                                                                                                            481
                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                     421
                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GATACCACATTAGAGCCAGAAGAGGCACCACCAAATACCAAATCTCTCAACCAGAAGTG
               TCCGGAGATGATGAGATGACACCGATGGTGCGGAAGATTTTGTCAGTGAGAACAGTAAC
                                                       AGTAGGACTGTAGACAGTGAAACTTGGTACTTCATGGTGAATGTCACAGATGCCATCTCA
                                                                                                                ATCAGTTGGACTAAGGATGGGGTGCACTTGGGGCCCAACAATAGGACAGTGCTTATTGGG
                                                                                                                                                                                                                                                                                                                                                   CTGGTCGTGGTCACCATGGCAACCTTGTCCCTGGCCCGGCCCTCCTTCAGTTTAGTTGAG
                                                                                                                                                                                                                                                                                                                                                                                                              TATGGAAGAGGACCGGGGATTGGTACCGTAACCATGGTCAGCTGGGGTCGTTTCATCTGC
TCCGGAGATGATGAGGATGACACCGATGGTGCGGAAGATTTTGTCAGTGAGAACAGTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAGTGACTGCAGCAGCGGCAGCGCCCCCGGTTCCTGAGCCCACCGCAGGCTGAAGGCA 180
                                                                                                                                                                                                                                 TACGTGCTGCGCCAGGGGAGTCGCTAGAGGTGCGCTGCCTGTTGAAAGATGCCGCCGTG
                                                                                                                                                                                                                                                     TACGTGGCTGCGCCAGGGGAGTCGCTAGAGGTGCGCTGCTGTTGAAAGATGCCGCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTGCGCGTAGTCCATGCCCGTAGAGGAAGTGTGCAGATGGGATTAACGTCCACATGGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTGCGCGTAGTCCATACACGAGAAGTGTGCAGATGGGATTAACGTCCACATGGAGA 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCCATCCCGACCCACGCGGGGCGCGGGGACAACACACGTCGCGGGAGGAGGAGCGTTGCCATTC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCCATCCCGACCCACGCGGGGCGCGGGGACACACACGGTCGCGGAGGAGCGTTGCCATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                papillary carcinoma and Wilm's tumour.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Score 4268; ilarity 100.0%; Pred. No. 0; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 24; Length 4268;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                    660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                     480
                                                                                                                                                                                                                                                                                                                         420
                                                          660
                                                                                                                   600
                                                                                                                                              600
                                                                                                                                                                          540
                                                                                                                                                                                                       540
                                                                                                                                                                                                                                                               480
                                                                                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                                                                                                                      360
                                                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                                                                               300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
```

Q

1860	GAGGCGGTCACCGTGGCCGTGAAGATGTTGAAAGATGATGCCACAGAGAAAAGACCTTTCT		Qy
Ö	GGTTGCTTTGGGCAAGTGGTCATGGCGGAAGCAGTGGGAATTGACAAAGACAAGCCCAAG	1741	Db
80	GTTGCTTTGGGCAAGTGGTCATGGCGGAAGCAGTGGGAATTGACAAAGACAAGCCCAAG	7	Qy
1740	GAGGACCCAAAATGGGAGTTTCCAAGAGATAAGCTGACACTGGGCAAGCCCCTGGGAGAA	1681	Db .
	ACCAPARA PATICAL ACCEPTED ON THE PROPERTY OF T	ς.	0 v
60	CCCCTCTTCAACGGCAGACACCCCCATGCTGGCAGGGGTCTCCGAGTATGAACTTCCA	1621 1621	D Qy
1620	TTTCGGCTGAGTCCAGCTCCTCCATGAACTCCAACACCCCGCTGGTGAGGATAACAACA	- G	ф
1620	GGATAACAAC	1561	Qy
Ġ	AGCAGCCAGCCGGCTGTGCACAAGCTGACCAAACGTATCCCCCTGCGGAGACAGGTAACA	1501	ф
1560	GCAGCCAGCCGGCTGTGCACAAGCTGACCAAACGTATCCCCCCTGCGGAGACAGGTAAC		Qy
Ċn	TGTATGGTGGTAACAGTCATCCTGTGCCGAATGAAGAACACGACCAAGAAGCCAGACTTC	1441	Ъ
1500	GTATGGTGGTAACAGTCATCCTGTGCCGAATGAAGAACACGACCAAGAAGCCAGAC	4	Qy
1440	ACAGCTTCCCCAGACTACCTGGAGATAGCCATTTACTGCATAGGGGTCTTCTTAATCGCC	1381	Db
1440	AGCTTCCCCAGACTACCTGGAGATAGCCATTTACTGCATAGGGGTCTTCTTAATC	1381	Qy
38	ATATCCTTTCACTCTGCATGGTTGACAGTTCTGCCAGCGCCTGGAAGAGAAAAGGAGATT	1321	Db
8	TATCCTTTCACTCTGCATGGTTGACAGTTCTGCCAGCGCCTGGAAGAGAAAAGGAG	w	Qy
w	CGGAATGTAACTTTTGAGGACGCTGGGGGAATATACGTGCTTGGCGGGTAATTCTATTGGG	1261	Db
1320	GGAATGTAACTTTTGAGGACGCTGGGGAATATACGTGCTTGGCGGGTAATTCTATT	on .	Qy
N	AAGGTTCTCAAGGCCGGCCGGTGTTAACACCCACGGACAAAGAGATTGAGGTTCTCTATATT	1201	Дb
1260	STTCTCAAGGCCGCCGGTGTTAACACCACGGACAAAGAGATTGAGGTTCTCTATA	N	Оу
0	TGGATCAAGCACGTGGAAAAGAACGGCAGTAAATACGGGCCCGACGGGCTGCCCTACCTC	1141	da
1200	GGATCAAGCACGTGGAAAAGAACGGCAGTAAATACGGGCCCGACGGGCTGCCCTACC	14	Qy
-	GTCGGAGGAGACGTAGAGTTTGTCTGCAAGGTTTACAGTGATGCCCAGCCCCACATCCAG	1081	Db
1140	TCGGAGGAGACGTAGAGTTTGTCTGCAAGGTTTACAGTGATGCCCCAGCCCCACATCC	1081	Qy
1080	GAGCGATCGCCTCACCGGCCCATCCTCCAAGCCGGCACTGCCGCCAAATGCCTCCACAGTG	1021	Db
1080	AGCGATCGCCTCACCGGCCCATCCTCCAAGCCGGACTGCCGGCAAATGCCTCCACAC	1021	Qy
02	ACCTGTGTGGTGGAGAATGAATACGGGTCCATCAATCACACGTACCACCTGGATGTTGTG	961	Дb
1020	CTGTGTGGTGGAGAATGAATACGGGTCCATCAATCACACGTACCACCTGGATGTTG	961	, oy
Ō	GAAACCAGCACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCTGACAAGGGAAATTAT	901	ф
960	CACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCTGACAAGGGAAATT	901	Qy
ō	CGGTGGCTGAAAAACCGGAAGGAGTTTAAGCAGGAGCATCGCATTGGAGGCTACAAGGTA	841	Дb
900	GGTGGCTGAAAAACGGGAAGGAGTTTAAGCAGGAGCATCGCATTGGAGGCTACAAGGT		. Qy
4	CCTGCGGCCAACACTGTCAAGTTTCGCTGCCCAGCCGGGGGAACCCAATGCCAACCCATG	781	фġ
	CTGCGGCCAACACTGTCAAGTTTCGCTGCCCAGCCGGGGGGAACCCAATGCCAACCA	781	Qy
	AACAAGAGAGCACCATACTGGACCAACACAGAAAAGATGGAAAAGCGGCTCCATGCTGTG	721	Db
780	GAGAGCACCATACTGGACCAACACAGAAAAGATGGAAAAGCGGCTCCATGCTG	721	Qy

8	ᄝ	δ	Db Q	ğ	Q	В	Qy	D S	5	9	рb	ş	gg qq	g	Qy	рь :	Ŷ	\$ 5	рь	Qy	B 8	} 5	, 6	В	δ	р	da	Qy	D _D
2881	2821	2821	2761	2701	2701	2641	2641	2581	1707	2521	2461	2461	2401	2341	2341	2281	2281	2221	2161	2161	2101	2101	2041	1981	1981	1921	1861	1861	1801
TATGTGTAAAGATTTATACAGTTGAAAACTTGTAATCTTCCCCAGGAGGAGAAGAAGGTT	TTGTTGTCTCCACTTGTATATATGGATCAGAGGAGTAAATAATTGGAAAAGTAATCAGCA		CAAACAGGACAGGACTGGGAACCTTAGCTTAGCTTAGCAGGAGACACATGCCTCCCAGAGC [CTCAGTATCCACACATAAACGGCAGTGTTAAAACATGAATGA	CTCAGTATCCACACATAAACGGCAGTGTTAAAACATGAATGA	TGTTCTTCAGGAGATGATTCTGTTTTTTCTCCAGACCCCATGCCTTACGAACCATGCCTT		TTGGACCTCAGCCAACCTCTCGAACAGTATTCACCTAGTTACCCTGACACAAGAAGATTCT		TTCAAGCAGTTGGTAGAAGACTTGGATCGAATTCTCACTCTCACAACCAATGAGGAATAC		G	GAGGAACTTTTTAAGCTGCTGAAGGAAGGACKCAGAATGGATAAGCCAGCCAACTGCACCGCACC	າ ດ	GOGGTGTTAATGTGGGAGATCTTCACTTTAGGGGGCTCGCCCTACCCAGGATTCCCGTG			GATATCAACAATATAGACTATTACAAAAAGACCACCAATGGGCGGCTTCCACTCAAGTGG [AGAAATGTTTTGGTAACAGAAAACAATGTGATGAAAATAGCAGACTTTGGACTCGCCAGA	CTGGCCAGAGGCATGGAGTACTTGGCTTCCCAAAAATGTATTCATCGAGATTTAGCAGCC		ATTAACCGTGTTCCTGAGGAGCAGATGACCTTCAAGGACTTGGTGTTCATGCACCTACCAG		GGCAACCTCCGAGAATACCTCCGAGCCCGGGAGGCCACCCGGGATGGAGTACTCCTATGAC:	CTTCTTGGAGCCTGCACACAGGATGGGCCTCTCTATGTCATAGTTGAGTATGCCTCTAAA .			
2940	2880	2880	2820	2760	2760	2700	2700	2640	2540	2580	2520	2520	2460	2400	2400	2340	2340	2280 2280	2220	2220			2100	2040	2040	1980	920	1920	.860
Db .	\$ B	. 5	pb b	Q.	Db :	o ç	3 5	P B	Qy	B	δ B	. 5	Db	Qγ	B 5	8 8	Qy	đđ	Qy	B 5	g B	οy	B	Qy	당 5	g B	φ,	ş 9	рb
3961 1	3961 1	1066	3841 1	3841 1			3721	3661 ¢	3661 C	3601 A	3541 T	2041		3481 T	<u>, , , , , , , , , , , , , , , , , , , </u>	3361 T	3361 T	3301 G	3301 G	241	3181 T	3181 T	3121 T		3061 T	3001 G		2941 TO	

		_ ,/- -																_
ρ _γ	₽ 24	함 상.	Оу	ad Að	ру	Оу	Qу	dd VQ	ФР	g Sy	dq Qy	Db VQ	Фр	Db Qy	ОУ	ду	ОУ	ф
3961 3961	3901	3841 3841	3781 3781	3721 3721	3661 3661	3601 3601	3541 3541	3481 3481	3421 3421	3361 3361	3301	3241 3241	3181 3181	3121 3121	3061 3061	3001 3001	2941 2941	2881
TTAAGGGATTGCTTTCATCTAATTCTGGCAGGACCTCACCAAAAGATCCAGCCTCATACC	TCATAGAAAATTGAAACACAGAGTTGTTCTGCTGATAGTTTTGGGGATACGTCCATCTTT	TTTGATAATGGCTTCCAGACTCTTTGCGTTGGAGACGCCTGTTAGGATCTTCAAGTCCCA.	GCTGGCCTTCTGCTTCTGAGTTGCACATTAATCAGATTAGCCTGATTCTCTTCAGTGAAT	ATCCATTCCTTGAGGACAGACCTTAGTTGAAATGATAGCAGAATGTGCTTCTCTGGCA .	CAACGTCTAACTGGACTTCCCAAGATAAATGGTACCAGCGTCCTCTTAAAAGATGCCTTA	AAGAACTCATTCATAGGAAGGTGTTTCATTTTGGTGTGCAACCCTGTCATTACGTCAACG	TTGTGTTTAAATGCTGCTGTCAGACGATTGTTCTTAGACCTCCTAAATGCCCCCATATTAA :	TTTGAAAAGAGAATATTTACAATATATGACTAATTTGGGGAAAATGAAGTTTTGATTTAT 3 	ATGCAGGCAGCACAGCAGACTAGTTAATCTATTGCTTGGACTTAACTAGTTATCAGATCC 3	TGGTAATATACAAAACAATTAATCATTTATAGTTTTTTTGTAATTTAAGTGGCATTTCT 3 	GAGGTGGAAAAATACTTTTGCTTTCAGGGAAAATGGTATAACGTTAATTTATTAATAAAT 3 	TITTAATAGCTATTTGCTAAATGCTGTTCTTACACATAATTTCTTAATTTTCACCGAGCA 3 	TATTTTTTGTATTGATTTAAATGGATGTCCCAATGCACCTAGAAAATTGGTCTCTCTT 3 	TGGATGTATGTAAATATATTCAAATTATGTATAAATATATAT	TAATTGGAGAAGATTTATGTCAGCACACACTTACAGAGCACAAATGCAGTATATAGGTGC 3 	GCTGTGGACCAGTAGGACTCAAGGTGGACGTGCGTTCTGCTTCCTTGTTAATTTTGTAA 3 	TCTGGAGCAGTGGACTGCCACAAGCCACCATGTAACCCCTCTCACCTGCGGTGCGTTCTG 3	TATGTGTAAAGATTTATACAGTTGAAAACTTGTAATCTTCCCCAGGAGGAGAAGAAGGTT 2
4020 4020	3960 3960	3900 3900	3840 3840	3780 3780	3720 3720	3660 3660	3600 3600	3540 3540	3480 3480	3420 3420	3360 3360	300	1240	180	1120	060	000	94

```
RESULT 3
ABL68594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 õ
  05-JUN-2000

05-JUN-2000

18-SEP-2000

18-SEP-2000

20-SEP-2000

20-SEP-2000

20-SEP-2000

21-SEP-2000

25-SEP-2000

25-SEP-2000

25-SEP-2000

25-SEP-2000

25-SEP-2000

25-SEP-2000

25-SEP-2000

25-SEP-2000

25-SEP-2000

26-SEP-2000

27-SEP-2000

27-SEP-2000

27-SEP-2000

28-SEP-2000

28-SEP-2000
                                                                                                                                                                                                                                                                                                                                      30-MAY-2001; 2001WO-US10838
                                                                                                                                                                                                                                                                                                                                                                13-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                     WO200194629-A2
                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; Cancer; colon; breast; ovary; oesophagus; kidney; thyroid; stomach; lung; prostate; pancreas; carcinoma; antitumour; cancerous; cytostatic; gene therapy; antineoplastic; Wilm's tumour; adenocarcingene; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Kidney cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABL68594 standard; DNA; 4268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABL68594;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TACATCAGACAAAATATCGCCGTTGTTCCTTCTGTACTAAAGTATTGTGTTTTGCTTTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAACACCCACTCACTTTGCAATAGCCGTGCAAGATGAATGCAGATTACACTGATCTTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAAAAAA 4268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAAAAAAA 4268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2000US - 234 559P
2000US - 234 559P
2000US - 234 523P
2000US - 234 924P
2000US - 235 077P
2000US - 235 082P
2000US - 235 134P
2000US - 235 638P
2000US - 235 638P
2000US - 235 71P
2000US - 235 84 0P
2000US - 235 86 0P
2000US - 235 86 3P
2000US - 236 63 2P
2000US - 236 63 2P
2000US - 236 61 3P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                          2000US-234034P
                                                                                                                                                                                                                                                                                                                  2000US-209473P
                                                                                                                                                                                                                                                                   2000US-234009P
                                                                                                                                                                                                                                                                                 2000US-233617P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gene sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ij
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                           adenocarcinoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4080
```

```
Ş
                                밁
                                                       Š
                                                                                   В
                                                                                                            δã
                                                                                                                                         멍
                                                                                                                                                              Qy
                                                                                                                                                                                             밁
                                                                                                                                                                                                                   Q
                                                                                                                                                                                                                                                B
                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                          The present invention describes a method (M1) for screening for an C anti-neoplastic agent. The method involves exposing cells to a chemical agent to be tested for anti-neoplastic activity, determining a change in CC agent to be tested for anti-neoplastic activity, determining a change in CC comprises a sequence (S) selected from 8447 sequences (given in ABL61664 CC to ABL70110), or is at least 95% identical to (S), where a change in CC expression is indicative of anti-neoplastic activity. (I) has cytostatic CC activity and can be used in gene therapy. M1 can be used for screening CC an anti-neoplastic agent, and can be used for producing a product which CC is the data collected with respect to the anti-neoplastic agent as a CC result of M1, and the data is sufficient to convey the chemical CC treatment of cancer such as colon, breast, stomach, lung, thyroid, CC adenocarcinoma, carcinoma, clear cell cancer, infiltrating ductal cancer, CC infiltrating lobular cancer, squamous cell carcinoma, neuroendocrine CC carcinoma, papillary carcinoma and Wilm's tumour.
                                                                                                                                                                                                                                                                                                     Matches 4268;
                                                                                                                                                                                                                                                                                                                 Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29-SEP-2000
02-OCT-2000
02-OCT-2000
02-OCT-2000
02-OCT-2000
02-OCT-2000
02-OCT-2000
03-OCT-2000
03-OCT-2000
03-OCT-2000
03-OCT-2000
03-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Young PE,
Soppet DR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Screening for anti-neoplastic agent involves exposing cells to chemical agent to be tested for anti-neoplastic activity, and determining a change in expression of a gene of a signature go
                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2002-188264/24.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (AVAL-) AVALON PHARM.
                                                                                      181
                                                                                                               181
                                                                                                                                         121
                                                                                                                                                                  121
                                                                                                                                                                                             61
                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                         CTGGTCGTGGTCACCATGGCAACCTTGTCCCTGGCCCGGCCCTCCTTCAGTTTAGTTGAG
                          TATGGAAGAGGACCGGGGATTGGTACCGTAACCATGGTCAGCTGGGGTCGTTTCATCTGC
                                                                             TTGCGCGTAGTCCATGCCCGTAGAGGAAGTGTGCAGATGGGATTAACGTCCACATGGAGA
                                                                                                                                                                                      TCCATCCCGACCCACGCGGGGCGCGGGGACAACACAGGTCGCGGAGGAGGAGCGTTGCCATTC
                                                                                                                                 AAGTGACTGCAGCAGCAGCGCCAGCGCTCGGTTCCTGAGCCCACCGCAGGCTGAAGGCA
                                                                                                                                                 AAGTGACTGCAGCAGCAGCGCAGCGCCTCGGTTCCTGAGCCCCACCGCAGGCTGAAGGCA
                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                        4268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID 6931;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Augustus M, Weaver Z;
                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2000US - 236891P.
2000US - 237172P.
2000US - 237278P.
2000US - 237294P.
2000US - 237295P.
2000US - 237316P.
2000US - 237316P.
2000US - 237598P.
2000US - 237604P.
2000US - 237604P.
2000US - 237606P.
2000US - 237606P.
2000US - 2376084P.
                                                                                                                                                                                                                                                                                                                                                     BP; 1199 A;
                                                                                                                                                                                                                                                                                                            100.0%; Score 4268; 100.0%; Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        44pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Carter
                                                                                                                                                                                                                                                                                                                                                   964 C; 1028 G; 1077
                                                                                                                                                                                                                                                                                                   <u>..</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ĸc,
                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ebner
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                æ
                                                                                                                                                                                                                                                                                                                            DB
                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                           24;
                                                                                                                                                                                                                                                                                                                                                    T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Endress
                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                         Length 4268;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 signature gene set
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Horrigan
                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                              Gaps
                                                    300
                                                                                                                                    180
                                                                                                                                                              180
                            300
                                                                                240
                                                                                                                                                                                                               120
                                                                                                         240
                                                                                                                                                                                       120
                                                                                                                                                                                                                                           60
                                                                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
```

0:

360

	ACAGCTTCCCCAGACTACCTGGAGATAGCCATTTACTGCATAGGGGTCTTCTTAATCGCC 1440	0у 1381	0
_	1 ATATCCTTTCACTCTGCATGGTTGACAGTTCTGCCAGCGCCTGGAAGAGAAAAGGAGATT 1380 	Qy 1321 Db 1321	п о
	1 CGGAATGTAACTTTTGAGGACGCTGGGGAATATACGTGCTTGGCGGGTAATTCTATTGGG 1320 	Qy 1261 Db 1261	рь Vo
-	1 AAGGTTCTCAAGGCCGCCGGTGTTAACACCACGGACAAAGAGATTGAGGTTCTCTATATT 1260 	Qy 1201 Db 1201	U 0
·	1 TGGATCAAGCACGTGGAAAAGAACGGCAGTAAATACGGGCCCGACGGGCTGCCCTACCTC 1200 	114	B 5
	GTCGGAGGAGACGTAGAGTTTGTCTGCAAGGTTTACAGTGATGCCCAGCCCCACATCCAG 1140 	y 1081 b 1081	д 4
•	GAGCGATCGCCTCACCGGCCCATCCTCCAAGCCGGACTGCCGGCAAATGCCTCCACAGTG 1080 	y 1021 b 1021	Db Db
Db 2:		y 961 b 961	da Aa
Db 1: Oy 2:	CGAAACCAGCACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCTGACAAGGGAAATTAT	y yo	da Vo
0y 1:	CGGTGGCTGAAAACGGGAAGGACTTTAAGCAGGAGCATCGCATTGGAGGCTACAAGGTA	y 841 b 841	g 4g
Db 11	CCTGCGGCCAACACTGTCAAGTTTCGCTGCCCAGCCGGGGGGAACCCAATGCCAACCATG	y 781 b 781	g qq
pb 16	AACAAGAGAGCACCATACTGGACCAACACAGAAAAGATGGAAAAGCGGCTCCATGCTGTG 780	y 721 b 721	P 9
Db 1;	TCCGGAGATGATGAGGATGACACCGATGGTGCGGAAGATTTTGTCAGTGAGAACAGTAAC 720	y 661 b 661	B 6
0y 17	8=8	y 601 b 601	P Q
0y 16	GAGTACTTGCAGATAAAGGGGCCACGCCTAGAGACTCCGGCCTCTATGCTTGTACTGCC 600	y 541 b 541	B 6
		y 481 b 481	D Q
Qy 15	TACGTGGCTGCGCCAGGGGAGTCGCTAGAGGTGCGCTGCTGTTGAAAGATGCCGCCGTG 480	y 421 b 421	g Qq
Db 14	GATACCACATTAGAGCCAGAAGAGCCACCAACCAAATACCAAATCTCTCAACCAGAAGTG 420	y 361 5 361	р б
Db 13			рb

2520 2520	AACGAACTGTACATGATGATGAGGGACTGTTGGCATGCAGTGCCCTCCCAGAGACCAACG	2461 2461	Оу
2460 2460	GAGGAACTTTTTAAGCTGCTGAAGGAAGGACACAGAATGGATAAGCCAGCC	2401 2401	Оу
2400	GGGGTGTTAATGTGGGAGATCTTCACTTTAGGGGGCTCGCCCTACCCAGGGATTCCCGTG	2341 2341	Qy Db
2340 2340	ATGGCTCCAGAAGCCCTGTTTGATAGAGTATACACTCATCAGAGTGATGTCTGGTCCTTC	2281 2281	Qy Db
2280 2280	GATATCAACAATATAGACTATTACAAAAAGACCACCAATGGGCGGCTTCCAGTCAAGTGG	2221 2221	Qy Db
2220	AGAAATGTTTTGGTAACAGAAAACAATGTGATGAAAATAGCAGACTTTGGACTCGCCAGA	2161 2161	Оу
2160 2160	CTGGCCAGAGGCATGGAGTACTTGGCTTCCCAAAAATGTATTCATCGAGATTTAGCAGCC	2101 2101	Qy Db
2100 2100	ATTAACCGTGTTCCTGAGGAGCAGATGACCTTCAAGGACTTGGTGTCATGCACCTACCAG	2041	Qy dd
2040	GGCAACCTCGGAGAATACCTCGGAGCCCGGGAGGCCACCGGGATGGAGTACTCCTATGAC	1981 1981	Qy Db
1980 1980	CTTCTTGGAGCCTGCACACAGGATGGGCCTCTCTATGTCATAGTTGAGTATGCCTCTAAA	1921 1921	Qy Db
1920 1920	GATCTGGTGTCAGAGATGAGATGATGAAGATGATTGGGAAACACAAGAATATCATAAAT 	1861 1861	Qy Db
1860	GAGGCGGTCACCGTGGCCGTGAAGATGTTGAAAGATGATGCCACAGAGAAAAGACCTTTCT 	1801	ду рь
1800	GGTTGCTTTGGGCAAGTGGTCATGGCGGAAGCAGTGGGAATTGACAAAGACAAGCCCAAG 	1741 1741	Оy
1740 1740	GAGGACCCAAAATGGGAGTTTCCAAGAGATAAGCTGACACTGGGCAAGCCCCTGGGAGAA	1681 1681	Оу
1680	CGCCTCTCTTCAACGGCAGACACCCCCATGCTGGCAGGGGTCTCCGAGTATGAACTTCCA 	1621 1621	Db Oy
1620 1620	GTTTCGGCTGAGTCCAGCTCCATGAACTCCAACACCCCGCTGGTGAGGATAACAACA	1561 1561	QУ
1560 1560	AGCAGCCAGCCGGCTGTGCACAAGCTGACCAAACGTATCCCCCTGCGGAGACAGGTAACA	1501 1501	Qy
1500 1500	TGTATGGTGGTAACAGTCATCCTGTGCCGAATGAAGAACACGACCAAGAAGACCAGACTTC	1441 1441	pb 04
1440	ACAGCTTCCCCAGACTACCTGGAGATAGCCATTTACTGCATAGGGGTCTTCTTAATCGCC	1381	Db

QΥ

04 04 05

24 24 25 26 27

```
3541
                    3481
                                    3421
                                             3421
                                                      3361
                                                              3361
                                                                       3301
                                                                                3301
                                                                                        3241
                                                                                                 3241
                                                                                                         3181
                                                                                                                   3181
                                                                                                                           3121
                                                                                                                                   3121
                                                                                                                                            3061
                                                                                                                                                     3061
                                                                                                                                                              3001
                            3481
                                                                                                                                                                      3001
                                                                                                                                                                               2941
                                                                                                                                                                                       2941
                                                                                                                                                                                                2881
                                                                                                                                                                                                        2881
                                                                                                                                                                                                                 2821
                                                                                                                                                                                                                          2821
                                                                                                                                                                                                                                   2761
                                                                                                                                                                                                                                           2761
                                                                                                                                                                                                                                                    2701
                                                                                                                                                                                                                                                            2701
                                                                                                                                                                                                                                                                     2641
                                                                                                                                                                                                                                                                             2641
                                                                                                                                                                                                                                                                                      2581
                                                                                                                                                                                                                                                                                                        2521
                                                                                                                                                                                                                                                                                                                 2521
TTTGAAAAGAGAATATTTACAATATATGACTAATTTGGGGAAAATGAAGTTTTGATTTAT
                                  TTTTAATAGCTATTTGCTAAATGCTGTTCTTACACATAATTTCTTAATTTTCACCGAGCA
                                                                                                       TAATTGGAGAAGATTTATGTCAGCACACACTTACAGAGCACAAATGCAGTATATAGGTGC
                                                                                                                                                                                                                                CAAACAGGACAGCACTGGGAACCTAGCTACACTGAGCAGGGAGACCATGCCTCCCAGAGC
                                                                                                                         TTGTTGTCTCCACTTGTATATATGGATCAGAGGAGTAAATAATTGGAAAAGTAATCAGCA
                                                                                                                                                                                                                                                  TTCAAGCAGTTGGTAGAAGACTTGGATCGAATTCTCACTCTCACAACCAATGAGGAATAC
                                                                                                                                                            3600
                 3540
                                   3480
                                           3480
                                                    3420
                                                                     3360
                                                                              3360
                                                                                       3300
                                                                                                       3240
                                                                                                                3240
                                                                                                                         3180
                                                                                                                                  3180
                                                                                                                                                   3120
                                                                                                                                                            3060
                                                                                                                                                                    3060
                                                                                                                                          3120
                                                                                                                                                                            3000
                                                                                                                                                                                      3000
                                                                                                                                                                                                       2940
                                                                                                                                                                                                               2880
                                                                                                                                                                                                                        2880
                                                                                                                                                                                                                                                                   2700
                                                                                                                                                                                              2940
                                                                                                                                                                                                                                 2820
                                                                                                                                                                                                                                          2820
                                                                                                                                                                                                                                                  2760
                                                                                                                                                                                                                                                                            2700
                                                                                                                                                                                                                                                                                             2640
                                                                                                                                                                                                                                                          2760
                                                                                                                                                                                                                                                                                                               2580
                                                                                                            밁
                                                                                                                 Qy
                                                                                                                            밁
                                                                                                                                   δõ
                                                                                                                                             рь
                                                                                                                                                     QΥ
                                                                                                                                                               Дb
                                                                                                                                                                      Qy
                                                                                                                                                                               Db
                                                                                                                                                                                       Qy
                                                                                                                                                                                                 밁
                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                    ₽
                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                     ₽
                                                                                                                                                                                                                                                                       Ъ
                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                        망
                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                         망
                                                                                                                                                                                                                                                                                                                 ρy
```

В Š 밁 Ş 밁 Qy B δ В Q В δõ 밁 Ş В QY В ρy В δ ₽ Qγ В δõ 망 Q

```
RESULT 4
AAQ21004
ID AAQ2
XX AAQ2
XX AAQ2
AC AAQ2
XX Bek
XX Fibi
KW Fibi
                                                                                                                                                                                                                                                                                                                 4261
           23-JAN-1992
                                   WO9200999-A
                                                                                                                     Homo
                                                                                                                                                                                                                                                      AAQ21004
                                                                                                                                                                                                                                                                                                                                                                                                              4141
                                                                                                                                                                                                                                                                                                                                                                                                                                                            4081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3721
                                                                                                                                                        Fibroblast
                                                                                                                                                                                                                              AAQ21004;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3661
                                                                                                                                             tyrosine
                                                                                                                                                                                                      20-MAY-1992
                                                                                                                                                                            receptor protein
                                                                                                                                                                                                                                                                                                               AAAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                        sapiens
                                                                                                                                                                                                                                                                                                                                                                           AAACACCCACTCACTTTGCAATAGCCGTGCAAGATGAATGCAGATTACACTGATCTTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTTGATAATGGCTTCCAGACTCTTTGCGTTGGAGACGCCTGTTAGGATCTTCAAGTCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCTGGCCTTCTGCTTCTGAGTTGCACATTAATCAGATTAGCCTGATTCTCTTCAGTGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAACGTCTAACTGGACTTCCCAAGATAAATGGTACCAGCGTCCTCTTAAAAGATGGCTTA
                                                                                                                                                                                                                                                                                                                                                         TCATAGAAAATTGAAACACAGAGTTGTTCTGCTGATAGTTTTGGGGGATACGTCCATCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCATAGAAAATTGAAACACAGAGTTGTTCTGCTGATAGTTTTGGGGATAGGTCCATCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATCCATTCCTTGAGGACAGACCTTAGTTGAAATGATAGCAGAATGTGCTTCTCTGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAGAACTCATTCATAGGAAGGTGTTTCATTTTGGTGTGCAACCCTGTCATTACGTCAACG
                                                                                                                                          st growth
kinase; b
                                                                                                                                                                                                                                                      standard;
                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                 4268
                                                                                                                                                                                                                                                                                                                                      4268
                                                       /*tag- a
                                                                               Location/Qualifiers
87..2546
                                                                     /*tag=
                                                                                                                                       n factor receptor; heparin bind
bacterially expressed kinase;
                                                                                                                                                                                                                                                    CDNA;
                                                                                                                                                                              gene
                                                                                                                                                                                                                                                    3416
                                                          bek
                                                        receptor
                                                                                                                                       binding proteins;
ase; CSF-1; PDGF;
                                                                                                                                         SS
                                                                                                                                                                                                                                                                                                                                                                                                                                                       4140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4140
                                                                                                                                                                                                                                                                                                                                                            4260
                                                                                                                                                                                                                                                                                                                                                                                   4260
                                                                                                                                                                                                                                                                                                                                                                                                         4200
                                                                                                                                                                                                                                                                                                                                                                                                                                4200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3660
```

```
g
                                                                                                                                                                                                                                                                 9
                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                            Ŷ
                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                          õ
                                               8
                                                                           Ş
                                                                                                             В
                                                                                                                                     δÃ
                                                                                                                                                                                                   Š
                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The CDNA sequence was obtd. by screening a one day old human brain CC stem CDNA library in lambda gtll with an antisense 33 base oligomer (3/mbek) complementary to the 3/ end of the murine bek coding sequence (2 (Arnbluth et al., Mol. Cell Biol. 8: 5541-5544), and using the CC resultant clone, lambda bek5 to rescreen the library. NIH 3T3 (CC cells were cotransfected with a 1:20 mixture of pSv2neo and the CC lone of the stream of the Sv40 promotor and cytomegalovirus (CC enhancer. Clones of bek transfected cells have increased binding (CC enhancer. Clones of bek transfected cells have increased binding (CC DNA sequencing. Receptor proteins encoded by this cDNA sequence may CC be used in pharmaceutical compons. to inhibit undesirable heparin-CC binding growth factor mediated cellular responses or to inhibit the CC binding of an opportunistic pathogen to human cells. Such undesirable (1 sation of tumours, mitogenic effects in psoriasis, arthritis, CC atherosclerosis and benign prostatic hypertrophy. The derived bek CC protein may also be used for screening drugs.
                ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 3406; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 3416 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 11; Fig 8; 65pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New fibroblast growth factor receptor proteins \ \ \  useful in treating GF-mediated conditions e.g. anglogenesis of tumours, mitogenic effects in psoriasis, arthritis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1992-056827/07.
P-PSDB; AAR20750.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (RORE ) RORER INT HOLDINGS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          06-JUL-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       03-JUL-1991;
                   513
                                                360
                                                                              453
                                                                                                             300
                                                                                                                                            393
                                                                                                                                                                           240
                                                                                                                                                                                                        333
                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                      273
                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                   213
                                                                                                                                                                                                                                                                                                                                                                                               153
                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                93 CACAGGTCGCGGAGGACCGTTGCCATTCAAGTGACTGCAGCAGCAGCGGCAGCGCCTCGG 152
                                                                                                                                                                                                                                                                                                                                                                                                                                N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      also AAQ21003, AAQ23618-20...
                                                                                                                                                                         CATGGTCAGCTGGGGTCGTTTCATCTGCCTGGTCGTCGTCACCATGGCAACCTTGTCCCT 332
                                                                                                                                                                                                                                                                                                                                                                                 TTCCTGAGCCCACCGCAGGCTGAAGGCATTGCGCGTAGTCCATGCCCGTAGAGGAAGTGT 212
GCCCAACAATAGGACAGTGCTTATTGGGGAGTACTTGCAGATAAAGGGCGCCCAGGCCTAG
                                                               GCGCTGCCTGTTGAAAGATGCCGCCGTGATCAGTTGGACTAAGGATGGGGTGCACTTGGG 512
                                                                                                             CAAATACCAAATCTCTCAACCAGAAGTGTACGTGGCTGCACCAGGGGAGTCGCTAGAGGT
                                                                                                                               CAAATACCAAATCTCTCAACCAGAAGTGTACGTGGCTGCGCCAGGGGAGTCGCTAGAGGT 452
                                                                                                                                                                                                                                         GCAGATGGGATTAACGTCCACATGGAGATATGGAAGAGGACCGGGGATTGGTACCGTAAC 272
                                                                                                                                                                                                                                                                                                                                                                                                                              CCCAGGTCGCGGAGGAGCGTTGCCATTCAAGTGACTGCAGCAGCAGCGGCACCG-CTCGG 60
                                                GCGCTGCCTGTTGAAAGATGCCGCCGTGATCAGTTGGACTAAGGATGGGGTGCACTTGGG
                                                                                                                                                                                                                                                                                                                                                                TTCCTGAGCCCACCGCA-GCTGAAGGCATTGCGCGTAGTCCATGCCCGTAGAGGAAGTGT 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Crumley
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           90US-0549587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         91WO-US04745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       953 A; 778 C; 868 G; 815 T; 2 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      79.28;
99.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ć
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Jaye MC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 3381; DB 13;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Schlessinger
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 3416;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            <u>ب</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                            239
                                                    419
                                                                                                                359
                                                                                                                                                                             299
                                                                                                                                                                                                          392
                     572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2
```

1652	CAACACCCCGCTGGTGAGGATAACAACACGCCTCTCTCAACGGCAGACACCCCCATGCT	1593	da
1559		1500	Vo
1592 1499	ACGTATCCCCCTGCGGAGACAGGTAACAGTTTCGGCTGAGTCCAGCTCCTCCATGAACTC	1533 1440	Qу
1532	GAAGAACACGACCAAGAAGCCAGACTTCAGCAGCCAGCCGGCTGTGCACAAGCTGACCAA	1473	Qy
1439		1380	Db
	TTACTGCATAGGGGTCTTCTTAATCGCCTGTATGGTGGTGATACAGTCATCCTGTGCCGAAT	1413 1320	Oy Db
1412	GCCAGCGCCTGGAAGAGAAAAGGAGATTACAGCTTCCCCAGACTACCTGGAGATAGCCAT	13 5 3	Qy
1319		1260	Db
1352 1259	TACGTGCTTGGCGGGTAATTCTATTGGGATATCCTTTCACTCTGCATGGTTGACAGTTCT	N N	Qy Db
1292	GGACAAAGAGATTGAGGTTCTCTATATTCGGAATGTAACTTTTGAGGACGCTGGGGAATA	1233	Qy
1199		1140	Db
1232	ATACGGGCCCGACGGCTGCCCTACCTCAAGGTTCTCAAGGCCGCCGGTGTTAACACCAC	1173	Qy
1139		1080	Db
1172	TTACAGTGATGCCCAGCCCCACATCCAGTGGATCAAGCACGTGGAAAAGAACGGCAGTAA	1113	Qy
1079		1020	Db
1112	CGGACTGCCGGCAAATGCCTCCACAGTGGTCGGAGGAGACGTAGAGTTTGTCTGCAAGGT	1053	dg
1019		960	Qy
	CAATCACACGTACCACCTGGATGTTGTGGAGCGATCGCCTCACCGGCCCATCCTCCAAGC	993	Qy Db
992	TGTGGTCCCATCTGACAAGGGAAATTATACCTGTGTGGTGGAGAATGAAT	933 840	Оу
932	GGAGCATCGCATTGGAGGCTACAAGGTACGAAACCAGCACTGGAGCCTCATTATGGAAAG	873	Оу
839		780	
872 779	AGCCGGGGGGAACCCAATGCCAACCATGCGGTGGCTGAAAAACGGGAAGGAGTTTAAGCA	813 720	Фу
812	AAAGATGGAAAAGCGGCTCCATGCTGTGCCTGCGGCCAACACTGTCAAGTTTCGCTGCCC	753	Оу
719		660	
752 659	GGAAGATTTTGTCAGTGAGAACAGTAACAACAAGAGAGCACCCATACTGGACCACACACA	600	Фр
692 599	CATGGTGAATGTCACAGATGCCATCTCATCCGGAGATGATGAGGATGACACCGATGGTGC	633 540	Qy
632	AGACTCCGGCCTCTATGCTTGTACTGCCAGTAGGACTGTAGACAGTGAAACTTGGTACTT	573	Qy
539		480	Db
479	GCCCAACAATAGGACAGTGCTTATTGGGGAGTACTTGCAGATAAAGGGCGCCACGCCTAG	420	DЬ

```
QY
  밁
                         밁
                                  õ
                                                В
                                                          δõ
                                                                          Ъ
                                                                                  Qy
                                                                                                 망
                                                                                                            Ş
                                                                                                                         Ъ
                                                                                                                                  δ
                                                                                                                                                 망
                                                                                                                                                                      ₽
                                                                                                                                                                                   Ş
                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                         Q
                                                                                                                                                          δÃ
                                                                                                                                                                                                밁
                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                 Q
                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                          ρ
                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                       망
                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                          γQ
                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                  δô
  2580
              2673
                           2520
                                      2613
                                                  2460
                                                                                                 2340
                                                              2553
                                                                          2400
                                                                                     2493
                                                                                                             2433
                                                                                                                         2280
                                                                                                                                      2373
                                                                                                                                                 2220
                                                                                                                                                             2313
                                                                                                                                                                         2160
                                                                                                                                                                                     2253
                                                                                                                                                                                                             2193
                                                                                                                                                                                                                                                                        1920
                                                                                                                                                                                                                                                                                                                                                1740
                                                                                                                                                                                                 2100
                                                                                                                                                                                                                         2040
                                                                                                                                                                                                                                     2133
                                                                                                                                                                                                                                                1980
                                                                                                                                                                                                                                                            2073
                                                                                                                                                                                                                                                                                                1860
                                                                                                                                                                                                                                                                                                                                                                                                1620
                                                                                                                                                                                                                                                                                                                                                                                                            1713
                                                                                                                                                                                                                                                                                     2013
                                                                                                                                                                                                                                                                                                            1953
                                                                                                                                                                                                                                                                                                                                    1893
                                                                                                                                                                                                                                                                                                                                                            1833
                                                                                                                                                                                                                                                                                                                                                                                                                        1560
                                                                                                                                                                                                                                                                                                                                                                                                                                     1653
                                                                                                                                                                                                                                                                                                                         1800
                                                                                                                                                                                                                                                                                                                                                                        1680
CACCAATGGGCGGCTTCCAGTCAAGTGGATGGCTCCAGAAGCCCTGTTTGATAGAGTATA
                                                                                                                                                                                                                                              CAAGGACTTGGTGTCATGCACCTACCAGCTGGCCAGAGGCATGGAGTACTTGGCTTCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                     GCATGCAGTGCCCTCGCAGAGACCAACGTTCAAGCAGTTGGTAGAAGACTTGGATCGAAT
                                                                             GCATGCAGTGCCCTCCCAGAGACCCAACGTTCAAGCAGTTGGTAGAAGACTTGGATCGAAT
                                                                                               CAGAATGGATAAGCCAGCCAACTGCACCAACGAACTGTACATGATGATGAGGGGACTGTTG
                                                                                                      CAGAATGGATAAGCCAGCCAACTGCACCAACGAACTGTACATGATGATGAGGGACTGTTG
                                                                                                                                                                                              AAAATGTATTCATCGAGATTTAGCAGCCAGAAATGTTTTGGTAACAGAAAACAATGTGAT
                                                                                                                                                                                                                                                                      CTATGTCATAGTTGAGTATGCCTCTAAAGGCAACCTCCGAGAATACCTCCGAGCCCGGAG
                                                                                                                                                                                                                                                                                                                      AGATGATGCCACAGAGAAAGACCTTTCTGATCTGGTGTCAGAGATGGAGGTGAAGAT
                                                                                                                                                                                                                                                                                                                                                                             AGTGGGAATTGACAAAGACAAGCCCAAGGAGGCGGTCACCGTGGCCGTGAAGATGTTGAA 1832
                                                                                                                                                                                                                                                                                                                                               AGATGATGCCACAGAGAAAGACCTTTCTGATCTGGTGTCAGAGATGGAGATGATGAAGAT
                                                                                                                                                                                                                                                                                                                                                                      AGTGGGAATTGACAAAGACAAGCCCAAGGAGGCGGTCACCGTGGCCGTGAAGATGTTGAA
2639
                                                                                                                                    2432
                                                                                                                                                                                                                                                                                                                                                                                                                                  1712
                        2579
                                    2672
                                                2519
                                                           2612
                                                                                    2552
                                                                                                2399
                                                                                                           2492
                                                                                                                       2339
                                                                                                                                                           2372
                                                                                                                                                                        2219
                                                                                                                                                                                                                                   2192
                                                                                                                                                                                                                                               2039
                                                                                                                                                                                                                                                                       1979
                                                                                                                                                                                                                                                                                                                                  1952
                                                                                                                                                                                                                                                                                                                                                           1892
                                                                        2459
                                                                                                                                                                                               2159
                                                                                                                                                                                                           2252
                                                                                                                                                                                                                       2099
                                                                                                                                                                                                                                                          2132
                                                                                                                                                                                                                                                                                  2072
                                                                                                                                                                                                                                                                                               1919
                                                                                                                                                                                                                                                                                                          2012
                                                                                                                                                                                                                                                                                                                       1859
                                                                                                                                                                                                                                                                                                                                               1799
                                                                                                                                                                                                                                                                                                                                                                                              1679
                                                                                                                                                                                                                                                                                                                                                                                                                       1619
```

```
멍
                δÃ
                               В
                                             δ
                                                             Дb
                                                                         οy
                                                                                            밁
                                                                                                         Q
                                                                                                                          8
                                                                                                                                       οy
                                                                                                                                                       밁
                                                                                                                                                                   δÃ
                                                                                                                                                                                    밁
                                                                                                                                                                                                   Š
                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                              å
                                                                                                                                                                                                                                                 뫄
                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                       δÃ
                  3453
    3360
                                 3300
                                                              3240
                                                                                             3180
                                                                                                                          3120
                                                                             3333
                                                                                                                                        3213
                                                                                                                                                       3060
                                                                                                                                                                       3153
                                                                                                                                                                                      3000
                                                                                                                                                                                                                    2940
                                                                                                                                                                                                                                  3033
                                                                                                                                                                                                                                                 2880
                                                                                                                                                                                                                                                                                                              2760
                                                                                                                                                                                                                                                                                                                                           2700
                                                                                                                                                                                                                                                                                                                                                           2793
                                                                                                                                                                                                                                                                                                                                                                                        2733
TTTTTTTTGTAATTTAAGTGGCATTTCTATGCAGGCAGCAGCAGCAGCTAGTTAATCTAT 3452
                                                            ATGGTATAACGTTAATTTATTAATAAATTGGTAATATACAAAACAATTAATCATTTATAG 3392
                                                                                          AAATATATATATATATATATACAAGGAGTTATTTTTGTATTGATTTTAAATGGATGTCCC
                                                                                                                                                                                 AACATGAATGACTGTGTCTGCCTGTCCCCAAACAGGACAGCACTGGGAACCTAGCTACAC
                                                                                                                                AATGCACCTAGAAAATTGGTCTCTCTTTTTTAATAGCTATTTGCTAAATGCTGTTCTTA
                                                                                                                                                                                                                                               TAACCCCTCTCACCTGCCGTGCGTTCTGGGCTGTGGACCAGTAGGACTCAAGGTGGACGTG
                                                                                                                                                                                                                                                                                     TAATCTTCCCCAGGAGAGAAGAAGGATTTCTGGAGCAGTGGACTGCCACAAGCCACCATG
                                                                                                                                                                                                                                                                                                                   GAGTAAATAATTGGAAAAGTAATCAGCATATGTGTAAAGATTTATACAGTTGAAAACTTG
                                                                                                                        AATGCACCTAGAAAATTGGTCTCTCTTTTTTAATAGCTATTTGCTAAATGCTGTTCTTA
                                                                                                                                                                                                                                                                              TAATCTTCCCCAGGAGGAAGAAGGTTTCTGGAGCAGTGGACTGCCACAAGCCACCATG
                                                                                                                                                                                                                                                                                                           GAGTANATAATTGGANANAGTAATCAGCATATGTGTAAAGATTTATACAGTTGAAAACTTG
                3509
                                                                                                                       3179
                                                                                                                                       3272
                                                                                                                                                      3119
                                                                                                                                                                   3212
                                                                                                                                                                                    3059
                                                                                                                                                                                                                                3092
                                                                                                                                                                                                                  2999
                                                                                                                                                                                                                                               2939
                                                                                                                                                                                                                                                              3032
                                                                                                                                                                                                                                                                             2879
                                                                                                                                                                                                                                                                                           2972
                                                                                                                                                                                                                                                                                                           2819
                                                                                                                                                                                                                                                                                                                          2912
                                                                                                                                                                                                                                                                                                                                         2759
                                                                                                                                                                                                                                                                                                                                                                        2699
                                                                                                                                                                                                                                                                                                                                                        2852
                                                                                                                                                                                                                                                                                                                                                                                      2792
```

ABL61834 standard; DNA; 3244

ABL61834;

15-MAY-2002 (first entry)

Colon adenocarcinoma related gene sequence SEQ ID NO:171

RESULT 5
ARL61834
ARL61834
ARC ARL6
XX ARL6
AC ARL6
XX Human; cancer; colon; breast; ovary; oesophagus; kidney; thyro; stomach; lung; prostate; pancreas; carcinoma; antitumour; cance cytostatic; gene therapy; antineoplastic; Wilm's tumour; adenoc $^{\mathrm{sb}}$ adenocarcinoma; cancerous;

Homo sapiens

WO200194629-A2

```
05-JUN-2000

05-UN-2000

18-SEP-2000

18-SEP-2000

20-SEP-2000

20-SEP-2000

20-SEP-2000

20-SEP-2000

25-SEP-2000

25-SEP-2000

25-SEP-2000

26-SEP-2000

26-SEP-2000

27-SEP-2000

27-SEP-2000

28-SEP-2000

29-SEP-2000

29-SEP-2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2000

2
                 The present invention describes a method (M1) for screening for an anti-neoplastic agent. The method involves exposing cells to a chemical agent to be tested for anti-neoplastic activity, determining a change in expression of at least one gene (I) of a signature gene set, where (I) comprises a sequence (S) selected from 8447 sequences (given in ABL61664 to ABL70110), or is at least 95% identical to (S), where a change in expression is indicative of anti-neoplastic activity. (I) has cytostatic activity and can be used in gene therapy. M1 can be used for screening an anti-neoplastic agent, and can be used for producing a product which is the data collected with respect to the anti-neoplastic agent as a result of M1, and the data is sufficient to convey the chemical structure and/or properties of the agent. M1 can be used in the treatment of cancer such as colon, breast, stomach, lung, thyroid,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Young P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Screening for anti-neoplastic agent involves exposing cells to a chemical agent to be tested for anti-neoplastic activity, and determining a change in expression of a gene of a signature gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-MAY-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1; SEQ ID 171; 44pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (AVAL-) AVALON PHARM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2002-188264/24.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Augustus M,
Weaver Z;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2000US-237294P.

2000US-237395P.

2000US-237316P.

2000US-237425P.

2000US-237598P.

2000US-237604P.

2000US-237608P.

2000US-237608P.

2000US-237608P.
ovarian, kidney,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2001WO-US10838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000US-245084P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2000US-236111P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2000US-235720P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2000US-235637P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2000US-235280P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2000US-234924P
2000US-235077P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2000US-234567P
2000US-234923P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2000US-234052P.
2000US-234509P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2000US-234009P.
2000US-234034P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Carter
prostate or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           <u>۾</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ebner
pancreatic cancer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           æ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Endress
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Horrigan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     set
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ន្តន្តន្តន្ត
₽
1115 CGAAACCAGCACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCTGACAAGGGAAATTAT 1174
```

```
adenocarcinoma, carcinoma, clear cell cancer, infiltrating ductal cancer, infiltrating lobular cancer, squamous cell carcinoma, neuroendocrine carcinoma, papillary carcinoma and Wilm's tumour.
```

Sequence 3244 BP; 861 > 795 C; 852 G; 736 T; 0 other;

:	1	tah 60 69. 60000 0670 A. 1000th 3044	
Ma	st Loc tches	al Similarity 89.7%; Pred. No. 0; 30.29; Conservative 0; Mismatches 1; Indels 348;	••
ΩУ	₩	GACCACTCTTCTGCGTTTGGAGTTGCTCCCC	
DЪ	215	CCAAGGACCACTCTTCTGCGTTTGGAGTTGCTCCCCCCAACCCCGGGCTCGTCGCTTT	
Qy	0.0	, N	
Вb	275	CCATCCCGACCCACGCGGGGGGGGGGACAACACAGGTCGCGGAGGAGCGTTGCCATT	
VΩ	121	AAGTGACTGCAGCAGCAGCGGCAGCGCCTCGGTTCCTGAGGCCCACCGCAGGCTGAAGGCA 180	
용	335	TGACTGCAGCAGCGGCAGCGCCTCGGTTCCTGAGCCCACCGCAGGCTGAAGGC	
ΩУ	181	TTGCGCGTAGTCCATGCCCGTAGAGGAAGTGTGCAGATGGGATTAACGTCCACATGGAGA 240	
ф	395	GCGCGTAGTCCATGCCCGTAGAGGGAAGTGTGCAGATGGGATTAACGTCCACATC	
γQ		TATGGAAGAGGACCGGGGATTGGTACCGTAACCATGGTCAGCTGGGGTCGTTTCATCTGC 300	
망	455	ATGGAAGAGGACCGGGGATTGGTACCGTAACCATGGTCAGCTGGGTCGTTTCATC	
γΩ	0	TGGTCGTGGTCACCATGGCAACCTTGTCCCTGGCCCGGCCCTCCTTCAGTTTAGTTGAG 3	
8		GCAACCTTGTCCCTGGCCCGGCCCTCCTTCAGTTTAGTTT	
Qy		GATACCACATTAGAGCCAGAAGGCCAACCAACCAAATACCAAATCTCTCAACCAGAAGTG 420	
밁	575	ATACCACATTAGAGCCAGAAGAGCCACCAACCAAATACCAAATCTCTCAACCAGAAC	
οy		TACGTGGCTGCGCCAGGGGAGTCGCTAGAGGTGCGCTGCTTGAAAGATGCCGCCGTG 480	
В	635	ACGTGGCTGCGCCAGGGGAGTCGCTAGAGGTGCGCTGTCTGAAAGATGCCGCCGT	
γQ	481	ATCAGTTGGACTAAGGATGGGGTGCACTTGGGGGCCCAACAATAGGACAGTGCTTATTGGG 540	
ф	695	AGTTGGACTAAGGATGGGGTGCACTTGGGGGCCCAACAATAGGACAGTGCTTATTC	
Qy		GAGTACTTGCAGATAAAGGGCGCCACGCCTAGAGACTCCGGCCTCTATGCTTGTACTGCC 600	
ф	755	TACTTGCAGATAAAGGGCGCCACGCCTAGAGACTCCGGCCTCTATGCTTGTACTGC	
γQ	601	TAGGACTGTAGACAGTGAAACTTGGTACTTC	
В	815	TGAAACTTGGTACTTCATGGTGAATGTCACAGATGCCATCTC	
δô	661	CCGGAGATGAGATGACGACCGATGGTGCGGAAGATTTTGTCAGTGAGAACAGT	
Dβ	875	\CCGATGGTGCGGAAGATTTTGTCAGTGAGAACAG	
οy	21	AACAAGAGAGCACCATACTGGACCACAACACAGAAAAGATGGAAAAAGCTGCGCTCCATGCTGTG 780	
Db	935	CCATACTGGACCAACACAGAAAAGATGGAAAAGCGGCTCCATGCT	
Qy	781	CCTGCGGCCAACACTGTCAAGTTTCGCTGCCCAGCCGGGGGGAACCCAATGCCAACCATG 840	
ф	995	CGCCAACACTGTCAAGTTTCGCTGCCCAGCCGGGGGGAACCCAATGCCAAC	
Qy	841	CGGTGGCTGAAAAACGGGAAGGAGTTTAAGCAGGAGCATCGCATTGGAGGCCTACAAGGTA 900	
В	1055	GGCTGAAAAACGGGAAGGAGTTTAAGCAGGAGCATCGCATTGGAGGCTACAAGGTA 1	
5	901	CGAAACCAGCACTGGAGCCTCATTATGGAAAGTGTGGGTCCCATCTGACAAGGGAAATTAT 960	
3		ACCAGCACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCTGACAAAGGGAAATTAT 11	

	QY 1981 GGCAACCTCCGAGAATACCTCCGAGCCCGGGAGGCCACCCGGGATGGAGTACTCCTATGAC 2040
	Db 1787 CTTCTTGGAGCCTGCACACAGGATGGGCCTCTATGTCATAGTTGAGTATGCCTCTAAA 1846
··· <u> </u>	Qy 1921 CTTCTTGGAGCCTGCACACAGGATGGGCCTCTCTATGTCATAGTTGAGTATGCCTCTAAA 1980
	Db 1727 GATCTGGTGTCAGAGATGGAGATGATGAGATGGGGAAACACAGAAGATATCATAAAT 1786
	Qy 1861 GATCTGGTGTCAGAGATGGAGATGATGAAGATGATTGGGAAACACAAGAATATCATAAAT 1920
	Qy 1801 GAGGCGGTCACCGTGGCCGTGAAGATGTTGAAAGATGATGACCACAGAGAAAGACCTTTCT 1860
	Db 1607 GGTTGCTTTGGGCAAGTGGTCATGGCGGAAGCAGTGGGAATTGACAAAGACAAGCCCAAG 1666
	OY 1741 GGTTGCTTTGGGCAAGTGGTCATGGCGGAAGCAGTGGGAATTGACAAAGACAAGCCCAAG 1800
	Db 1547 GAGGACCCAAAATGGGAGTTTCCAAGAGATAAGCTGACACTGGGCAAGCCCCTGGGAGAA 1606
	QY 1681 GAGGACCCAAAATGGGAGTTTCCAAGAGATAAGCTGACACTGGGCAAGCCCCTGGGAGAA 1740
	1487
·	1621 CCCCTCTTCTTCAACCCCAACACCCCTATCCTTCACCCCACCCTTCTT
	142
	1561 GTTTTCGGCTGAGTTCCAGCTTCCATCCAACCACCACACACCACCACCACCACCACCAC
	1427
	A 156
	Db 1427 1426
	Qy 1441 TGTATGGTGGTAACAGTCATCCTGTGCCGAATGAAGAACACGACCAAGAAGCCAGACTTC 1500
	Db 1427 1426
	QY 1381 ACAGCTTCCCCAGACTACCTGGAGATAGCCATTTACTGCATAGGGGTCTTCTTAATCGCC 1440
	Db 1427 1426
	QY 1321 ATATCCTTTCACTCTGCATGGTTGACAGTTCTGCCAGCGCCTGGAAGAGAAAAGGAGATT 1380
	Db 1427 1426
	QY 1261 CGGAATGTAACTTTTGAGGACGCTGGGGAATATACGTGCTTGGCGGGTAATTCTATTGGG 1320
	Db 1415 AAGGTTCTCAAG 1426
	QY 1201 AAGGTTCTCAAGGCCGCCGGTGTTAACACCCACGGACAAAGAGATTGAGGTTCTCTATATT 1260
	Db 1355 TGGATCAAGCACGTGGAAAAGAACGGCAGTAAATACGGGCCCGACGGCCTGCCCTACCTC 1414
	OY 1141 TGGATCAAGCACGTGGAAAAGAACGGCAGTAAATACGGGCCCGACGGGCTGCCCTACCTC 1200
	Db 1295 GTCGGAGGAGACGTAGAGTTTGTCTGCAAGGTTTACAGTGATGCCCAGCCCCACATCCAG 1354
	OY 1081 GTCGGAGGAGACGTAGAGTTTGTCTGCAAGGTTTACAGTGATGCCCAGCCCCACATCCAG 1140
·	Db 1235 GAGCGATCGCCTCACCGGCCCATCCTCCAAGCCGGCAAATGCCTCCACAGTG 1294
	1021 03003400000000000000000000000000000000
	QY 961 ACCTGTGTGGGGGAGAATGAATACGGGTCCATCAATCACACGTACCACCTGGATGTTGTG 1020

	Qy	Db	Оy	dd	o _v	Db	Qy	Db	Q _y	Db	Qy	Db	Оу	Db	οy	Db	Qy	Db	Qy	Db	Qy	Db	γQ	ДЪ	Qy	Db	Qy	дд	Оу	фd	νо	Db	Qy	Db	Оу	Db	Oy
ACCOTETTICCTORGGAGCAGATGACCTTICAAGAATTGATTATATATATATATATATATATATATATAT	12	92	90	86	0	80	94	74	88	83	82	62	76	56	70	50	64	44	58	38	52	32	46	26	40	20	ω 4	14	28	80	22	02	16	96	\vdash	ig.	2041
	GATGTATGTAAATATATTCAAATTATGTATAAATATATAT	AATTGGAGAAGATTTATGTCAGCACACACTTACAGAGCACAAATGCAGTATATAGGTGC 2	AATTGGAGAAGATTTATGTCAGCACACACTTACAGAGCACAAATGCAGTATATAGGTGC 3	TGTAA 2		CGTTCTG 2	SAGCAGTGGACTGCCACAAGCCACCATGTAACCCCCTCTCTAACCTGCCCTCCCCTTCTC 2	I	IGTAAAGATTTATACAGTTGAAAACTTGTAATCTTCCCCAGGAGGAGAAGAACCTT 2	HIIIIIII AATCAGCA 2	AATCAGCA 2	AAACAGGACAGCACTGGGAACCTAGCTACACTGAGCAGGGAGACCATGCCTCCCAGAGC 2	AAACAGGACAGCACTGGGAACCTAGCTACACTGAGCAGGGAGACCATGCCTCCCAGAGC 2	CCTGTCCC 2	CCTCAGTATCCACACATAAACGGCAGTGTTAAAACATGAATGA	CATGCCTT 2	TGTTCTTCAGGAGATGATTCTGTTTTTTTCTCCAGACCCCATGCCTTACGAACCATGCCTT 2	TTGGACCTCAGCCAACCTCTCGGAACAGTATTCACCTAGTTACCCTGACACAAGAAGTTCT 2	TTGGACCTCAGCCAACCTCTCGAACAGTATTCACCTAGTTACCCTGACACAAGAAGTTCT 2	TTCAAGCAGTTGGTAGAAGACTTGGATCGAATTCTCACTCTCACAACCAATGAGGAATAC 2	TTCAAGCAGTTGGTAGAAGACTTGGATCGAATTCTCACTCTCACAACCAATGAGGAATAC 2	AACGAACTGTACATGATGAGGGGACTGTTGGCATGCAGTGCCCTCCCAGAGACCAACG 2	ဂ ၃		GAGGAACTTTTTAAGCTGCTGAAGGAAGGACACAGAATGGATAAGCCAGCC	GGGGTGTTAATGTGGGAGATCTTCACTTTAGGGGGCTCGCCCTACCCAGGGATTCCCCGTG 2	GGGGTGTTAATGTGGGAGATCTTCACTTTAGGGGGCTCGCCCTACCCAGGGATTCCCCTG 2	ATGGCTCCAGAAGCCCTGTTTGATAGAGTATACACTCAGCAGTGATGTGTTCTGGTCCTTC 2	ATGGCTCCAGAAGCCCTGTTTGATAGAGTATACACTCATCAGAGTGATGTCTGGTCCTTC 2	GATATCAACAATATAGACTATTACAAAAAGACCACCAATGGGCGGCTTCCAGTCAAGTGG 2	GATATCAACAATATAGACTATTACAAAAAGACCACCAATGGGCGGCTTCCAGTCAAGTGG 2		AGAAATGTTTTGGTAACAGAAAACAATGTGATGAAAATAGCAGACTTTGGACTCGCCAGA 2	CTGGCCAGAGGCATGGAGTACTTGGCTTCCCAAAAATGTATTCATCGAGAGTTTAGCAGCC 2	GGCTTCCCAAAAATGTATTCATCGAGATTTAGCAGCC 2	_	ATTAACCGTGTTCCTGAGGAGCAGATGACCTTCAAGGACTTGGTGTGTCATGCACCTACCAG 21

B

Length

0;

```
RESULT 6
ABL91742
5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                     The invention relates to a method for inhibiting expression of a target gene (ABL91658-ABL91797) in a cell by introducing at least one oligoribonucleotide that has a double-stranded structure consisting of all most 49 sequential nucleotide pairs, with at least part of one strand complementary with the target gene and has at least part of one strand single-stranded segment of 1-4 nt. The method provides oligoribonucleotides for antisense inhibition of gene expression useful e.g. for treating tumours but the oligoribonucleotides may also be directed against genes present in pathogens (e.g. Plasmodium or viruses/viroids, pathogenic on humans, animals or plants) or against cytokine, id, developmental or prion genes. The method provides more effective inhibition of gene expression than use of known oligonucleotides, probably because the unpaired overhang increases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2987
                                                                                                                                                                                                                                                                                                                                                  Human; HIV; HCV; gene expression; oligoribonucleotide: tumour; pathoge plasmodium; virus; viroid; cytokine; prion; antisense oligonucleotide; cytostatic; virucide; protozoacide; antibacterial; ds.
                                                                                                                                                                                                                                                                                                                                                                                        Human
                                                                                                                                                                                                                                                                                                                                                                                                                                            ABL91742
                                                                                                                                                                                                                                                              09-JAN-2001; 2001DE-1000586
                                                                                                                                                                                                                                                                               09-JAN-2001; 2001DE-1000586
                                                                                                                                                                                                                                                                                                                  DE10100586-C1
                                                                                                                                                      Claim 13;
Sequence
                                                                                                                                                                               Inhibiting gene expression by introducing double-stran
                                                                                                                                                                                                                                            (RIBO-) RIBOPHARMA AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTTTAATAGCTATTTGCTAAATGCTGTTCTTACACATAATTTCTTAATTTTCACCGAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TATTTTTTGTATTGATTTTAAATGGATGTCCCAATGCACCTAGAAAATTGGTCTCTCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2002-270454/32.
                                                                                                                                                                                                                                                                                                                                   sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGGTAATATACAAAACAA 3378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGGTAATATACAAAACAA 3244
                                                                                                                                                                                                                                                                                                                                                                                       polynucleotide SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                            standard;
2466
                                                                                                                                                     Page
                                                                                                                                                                                                                           Limmer
вР;
                 thus
                                                                                                                                                                               double-stranded
671
                                                                                                                                                    104pp; German.
                  intracellular
                                                                                                                                                                                                                            ß
                                                                                                                                                                                                                                                                                                                                                                                                         entry)
?
                                                                                                                                                                                                                                                                                                                                                                                                                                             2466
                                                                                                                                                                                                                            Rost
 604
                                                                                                                                                                                        'n
                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                             ₽₽
 ü
                                                                                                                                                                                cells, useful for e.g. treating tumors, complementary oligoRNA having unpaired
                                                                                                                                                                                                                                                                                                                                                                                        85
656
                                                                                                                                                                                                                            Hadwiger
                  concentration.
ç,
 535
 +7
 0
                                                                                                                                     target
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3046
                                                                                                                     of.
                                                                                                                     at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Вр
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                     Ş
                                                                                                                                                                                                         δõ
                                                                                                                                                                                                                            ₽
                                                                                                                                                                                                                                            γQ
                                                                                                                                                                                                                                                                Вþ
                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                  δô
                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                          õ
                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                             Q
                                                                                 밁
                                                                                                 οy
                                                                                                                     당
                                                                                                                                    Š
                                                                                                                                                        밁
                                                                                                                                                                                          밁
           망
                        δ
                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local
                                                                                                   1114
                                                                                                                                                                                                                                                                                                                                                                                                                             574
                                                                                                                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                       1054
                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                       694
                                                                                                                                                                                                                                                                                                                                                                         361
                                                                                 841
                                                                                                                      781
                                                                                                                                                        721
                                                                                                                                                                         994
                                                                                                                                                                                           661
                                                                                                                                                                                                             934
                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                874
                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                    754
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
```

```
Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches 2466;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CGCTGCCTGTTGAAAGATGCCGCCGTGATCAGTTGGACTAAGGATGGGGTGCACTTGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCCCGGCCCTCCTTCAGTTTAGTTGAGGATACCACATTAGAGCCAGAAGAGCCACCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCCAACAATAGGACAGTGCTTATTGGGGAGTACTTGCAGATAAAGGGCGCCACGCCTAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAATACCAAATCTCTCAACCAGAAGTGTACGTGGCTGCGCCAGGGGAGTCGCTAGAGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                       AAGATGGAAAAGCGGCTCCATGCTGTGCCTGCCGGCCAACACTGTCAAGTTTCGCTGCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATGGTGAATGTCACAGATGCCATCTCATCCGGAGATGATGAGGATGACACCGATGGTGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAATACCAAATCTCTCAACCAGAAGTGTACGTGGCTGCGCCAGGGGAGTCGCTAGAGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGCATCGCATTGGAGGCTACAAGGTACGAAACCAGCACTGGAGCCTCATTATGGAAAGT
                                                                                                                                         TACAGTGATGCCCAGCCCCACATCCAGTGGATCAAGCACGTGGAAAAGAACGACCGCAGTAAA 1173
                                                                                                                                                                              GGACTGCCGGCAAATGCCTCCACAGTGGTCGGAGGAGACGTAGAGTTTGTCTGCAAGGTT 1113
                                                                                                                                                                                                                                GAGCATCGCATTGGAGGCTACAAGGTACGAAACCAGCACTGGAGCCTCATTATGGAAAGT
                                                                                                                                                                                                                                                                                                                                                                                                   GCCGGGGGGAACCCAATGCCAACCATGCGGTGGCTGAAAAACGGGAAGGAGTTTAAGCAG
                                     GACAAAGAGATTGAGGTTCTCTATATTCGGAATGTAACTTTTGAGGACGCTGGGGAATAT
                                                                            TACGGGCCCGACGGCTGCCCTACCTCAAGGTTCTCAAGGCCGCCGGTGTTAACACACCACG
                                                                                        TACGGGCCGACGGCCTGCCCTACCTCAAGGTTCTCAAGGCCGCCGGTGTTAACACCACG 1233
                                                                                                                             TACAGTGATGCCCAGCCCCACATCCAGTGGATCAAGCACGTGGAAAAGAACGGCAGTAAA
                                                                                                                                                                                                                                                                                                                                                                                          GCCGGGGGGAACCCAATGCCAACCATGCGGTGGCTGAAAAAACGGGAAGGAGTTTAAGCAG
 ACGTGCTTGGCGGGTAATTCTATTGGGATATCCTTTCACTCTGCATGGTTGACAGTTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    57.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2466; L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60
                                                                                                                                                                                                                                                                1053
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 393
                                                                                                                                  900
                                                                                                                                                                                                                                                                                       720
                                                                                                                                                                                                                                                                                                                993
                                                                                                                                                                                                                                                                                                                                         660
                                                                                                                                                                                                                                                                                                                                                                 933
                                                                                                                                                                                                                                                                                                                                                                                            600
                                                                                                                                                                                                                                                                                                                                                                                                                    873
                                                                                                                                                                                                                                                                                                                                                                                                                                            540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    813
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
      1353
```

```
Ъ
                             В
                                      Ş
                                               Вb
                                                       Ş
                                                                밁
                                                                        δõ
                                                                                   ₽
                                                                                          Qy
                                                                                                   밁
                                                                                                           Qγ
                                                                                                                            Qγ
                                                                                                                                       밁
                                                                                                                                             δõ
                                                                                                                     밁
                                                                                                                                                      밁
                                                                                                                                                               δÃ
                                                                                                                                                                         Ъ
                                                                                                                                                                                δÃ
                                                                                                                                                                                         DЪ
                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                             당
                                                                                                                                                                                                                                                      οy
                                                                                                                                                                                                           В
                                                                                                                                                                                                                                    γQ
                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                       Š
                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                          γQ
                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                    В
              2041
                                1981
                                        2254
                                                 1921
                                                          2194
                                                                   1861
                                                                          2134
                                                                                            2074
                                                                                                    1741
                                                                                                             2014
                                                                                                                                                                                  1774
                                                                                                                                                                                           1441
                                                                                   1801
                                                                                                                      1681
                                                                                                                               1954
                                                                                                                                       1621
                                                                                                                                                1894
                                                                                                                                                         1561
                                                                                                                                                                 1834
                                                                                                                                                                          1501
                                                                                                                                                                                                   1714
                                                                                                                                                                                                            1381
                                                                                                                                                                                                                     1654
                                                                                                                                                                                                                             1321
                                                                                                                                                                                                                                      1594
                                                                                                                                                                                                                                                        1534
                                                                                                                                                                                                                                                                         1474
                                                                                                                                                                                                                                                                                 1141
                                                                                                                                                                                                                                                                                          1414
                                                                                                                                                                                                                                               1261
                                                                                                                                                                                                                                                                1201
                                                                                                                                                                                                                                                                                                           1354
                                                                                                                                                                                                                                                                                                                     1021
                                                                                                                                                                                                                                                                                                   1081
ACCAATGGGCGGCTTCCAGTCAAGTGGATGGCTCCAGAAGCCCTGTTTGATAGAGTATAC
                                               AAAATAGCAGACTTTGGACTCGCCAGAGATATCAACAATATAGACTATTACAAAAAGACC
                                                                                 AAGGACTTGGTGTCATGCACCTACCAGCTGGCCAGAGGCATGGAGTACTTGGCTTCCCAA
                                                                                                  CTGACACTGGGCAAGCCCCTGGGAGAAGGTTGCTTTTGGGCAAGTGGTCATGGCGGAAGCA
                                                                                                                                                                                                         ATTGGGAAACACAAGAATATCATAAATCTTCTTGGAGCCTGCACACAGGATGGGCCTCTC
                                                                                                                                                      AACACCCCGCTGGTGAGGATAACAACACGCCTCTCTTCAACGGCAGACACCCCCATGCTG
                                                                                                                                                                                                                                            CGTATCCCCCTGCGGAGACAGGTAACAGTTTCGGCTGAGTCCCAGGTCCTCCATGAACTCC
                                                                                                                                                                                                                                                                               2433
             2100
                              2040
                                               1980
                                                                1920
                                                                                 1860
                                                                                          2133
                                                                                                   1800
                                                                         2193
                                                                                                           2073
                                                                                                                             2013
                                                                                                                                                      1620
                                                                                                                                                                                1833
                                                                                                                                                                1893
                                                                                                                                                                        1560
                                                                                                                                                                                         1500
                                                                                                                                                                                                          1440
                                                                                                                                                                                                                   1713
                                                                                                                                                                                                                                    1653
                                                                                                                                                                                                                                                              1260
                                                                                                                                                                                                                                                                       1533
                                                                                                                                                                                                                            1380
                                                                                                                                                                                                                                             1320
                                                                                                                                                                                                                                                      1593
                                                                                                                                                                                                                                                                                1200
                                                                                                                                                                                                                                                                                         1473
                                                                                                                                                                                                                                                                                                          1413
                                                                                                                                                                                                                                                                                                                  1080
```

δÃ

δ

```
В
                                                                                                                                                                                                                                                                                                                                                                                                                 ζQ
                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                 28-DEC-1990;
27-APR-1990;
31-JUL-1990;
14-SEP-1990;
A cDNA library prepared from human cancer cell line Kato III mRNA was screened with an oligonucleotide corresponding to amino acids 529-541 of chicken basic FGF receptor. Three positive clones were obtained. One was cloned into pUC118/119 to give pTB1229 (see
                                                                                           WPI; 19
P-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                  2461
                                                          neoplasia,
                                                                                                                                                                                                                                                                                                                                                                                                                 2734
                                                                                                                                                                                                                                                                                                                                                                                                                                  2401
                                           Example
                                                                                                                                                                                          25-APR-1991;
                                                                                                                                                                                                                          WO9117183-A
                                                                                                                                                                                                                                                                                                          Clone
                                                                                                                                 (TAKE )
                                                                                                                                                                                                          14-NOV-1991
                                                                                                                                                                                                                                                                                                                          18-FEB-1992
                                                                                                                                                                                                                                                                                                                                                         AAQ14850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2101
                                                      mutein(s) of proteins - with fibroblast growth fact eptor activity, useful for treating multiple endocriplasia, prostatic hypertrophy, used for diagnosis
                                                                                                 1991-353723/48
                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCTAGTTACCCTGACACAAGAAGTTCTTGTTCTTCAGGAGATGATTCTGTTTTTTCTCCA
                                                                                                                                                                                                                                                                          sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                             GACCCCATGCCTTACGAACCATGCCTTCCTCAGTATCCACACATAAACGGCAGTGTTAAA 2733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CATGCAGTGCCCTCCCAGAGACCAACGTTCAAGCAGTTGGTAGAAGACTTGGATCGAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CATGCAGTGCCCTCCCAGAGACCAACGTTCAAGCAGTTGGTAGAAGACTTTGGATCGAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGAATGGATAAGCCAGCCAACTGCACCAACGGACTGTACATGATGATGAGGGACTGTTGG
                                                                                                                                                                                                                                                                                                                                                                                                  ACATGA
                                                                                                                                                                                                                                                                                                                                                                                                                 ACATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PTB1284
                                                                                                                                                                                                                                                                                          fibroblast
                                          Ψ
                                                                                           AAR15268
                                                                                                                                  TAKEDA
                                                                                                                  ζ,
                                                                                                                                                                                                                                                                                                                                                        standard;
                                          Fig
                                                                                                                                                                                                                                                                                                                                                                                                 2466
                                                                                                                                                                                                                                                                                                                                                                                                                 2739
                                                                                                                   Senoo
                                                                                                                                                 90JP-0415801.
90JP-0113146.
90JP-0204438.
90JP-0245256.
                                                                                                                                                                                                                                                                                                       encoding complete FGF receptor
                                          7;
                                                                                                                                 CHEMICAL
                                                                                                                                                                                          91WO-JP00557
                                                                                                                                                                                                                                        Location/Qualifiers
25..2334
/*tag= a
                                          88pp;
                                                                                                                                                                                                                                                                                        growth factor;
                                                                                                                 ĭ
                                                                                                                                                                                                                                                                                                                                                         DNA;
                                                                                                                                                                                                                                                                                                                         entry)
                                                                                                                  Watanabe
                                                                                                                                 UNI
                                          English.
                                                                                                                                                                                                                                                                                                                                                         2676
                                                                                                                                 줐
                                                                                                                   H
                                                                                                                                                                                                                                                                                         cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2340
                                                                                                                                                                                                                                                                                                                                                                                                                                                               2400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2160
```

```
Db
                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ŷ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  88888888
                                                                                                                                                      당
                                                                                                                                                                                                             Q
                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                              멍
                                                                                                                                                                                                                                                                                                                                   ş
                                                                                                                                                                                                                                                                                                                                                         망
                                                                                                                                                                                                                                                                                                                                                                         20
                                                                                                                                                                                                                                                                                                                                                                                               Вþ
                               В
                                                 δÔ
                                                                      망
                                                                                       Ş
                                                                                                             Вþ
                                                                                                                               õ
                                                                                                                                                                      Q
            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 2259; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAQ14849). The complete FGF coding sequence was obtained by ligating the insert from pTB1229 to the DNA sequence of the plasmid pTB1281 insert which encodes the carboxyl terminus of the FGF receptor from Glu 533 onwards.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 2676 BP;
             1150
                                                    1090
                                                                                            1030
                                                                                                                                                                                                                                                                                                                                                                                                                                                           490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                310
                                                                                                                                                                                                                                                                                                                                       670
                                                                                                                                                                                                                                                                                                                                                                              610
                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                     550
                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        250
                                841
                                                                        781
                                                                                                               721
                                                                                                                                  970
                                                                                                                                                       661
                                                                                                                                                                          910
                                                                                                                                                                                              601
                                                                                                                                                                                                                950
                                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                        790
                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                               730
                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ш
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGACCGGGGATTGGTACCGTAACCATGGTCAGCTGGGGTCGTTTCATCTGCCTGGTCGTG
                                                                                                                                                                                                                                                                                                                                                                                                CAGATAAAGGGCGCCACGCCTAGAGACTCCGGCCTCTATGCTTGTACTGCCAGTAGGACT 609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCGCCAGGGAGTCGCTAGAGGTGCGCTGCTGTTGAAAGATGCCGCCGTGATCAGTTGG 489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTCACCATGGCAACCTTGTCCCTGGCCCGGCCCTCCTTCAGTTTAGTTGAGGATACCACA 369
                                                                                                                                                     CACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCTGACAAGGGAAATTATACCTGTGTG
                                                                                                                                                                                                                                                                                                                                                         ACTAAGGATGGGGTGCACTTGGGGCCCAACAATAGGACAGTGCTTATTGGGGAGTACTTG
CACGTGGAAAAGAACGGCAGTAAATACGGGCCCGACGGGCTGCCCTACCTCAAGGTTCTC
                                                                                                                                                                                             AACACTGTCAAGTTTCGCTGCCCAGCCGGGGGGAACCCAATGCCAACCATGCGGTGGCTG
                                                                                                                                                                                                                                                                                       GCACCATACTGGACCAACACAGAAAAGATGGAAAAGCGGCTCCATGCTGTGCCTGCGGCC
                                                                                                                                                                                                                                                                                                                              GATGAGGATGACACCGATGGTGCGGAAGATTTTGTCAGTGAGAACAGTAACAACAACAGAGA 729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTAGAGCCAGAAGAGCCAACCAAATACCAAATCTCTCAACCAGAAGTGTACGTGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTAGAGCCAGAAGAGCCAACCAAATACCAAATCTCTCAACCAGAAGTGTACGTGGCT 429
                                           GACGTAGAGTTTGTCTGCAAGGTTTACAGTGATGCCCAGGCCCCACATCCAGTGGATCAAG
                                                                      CCTCACCGGCCCATCCTCCAAGCCGGACTGCCGGCAAATGCCTCCACAGTGGTCGGAGGA 1089
                                                                                                                          GTGGAGAATGAATACGGGTCCATCAATCACACGTACCACCTGGATGTTGTGGAGCGATCG
                                                                                                                                                                                                                                                                            GCACCATACTGGACCAACACAGAAAAGATGGAAAAGCGGCTCCATGCTGTGCCTGCGGCC
                                                                                                                                                                                                                                                                                                                   GATGAGGATGACACCGATGGTGCGGAAGATTTTGTCAGTGAGAACAGTAACAACAAGAGA 480
                                GACGTAGAGTTTGTCTGCAAGGTTTACAGTGATGCCCAGCCCCACATCCAGTGGATCAAG
                                                                                                                GTGGAGAATGAATACGGGTCCATCAATCACACGTACCACCTGGATGTTGTGGAGCGATCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    51.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Α,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 2188; D
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ი;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  550 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2676;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                            549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         309
                                                                                                                                                       720
                                                                                                                                                                                                                   909
                                                                                                                                                                                                                                                         849
                                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                                                                                                                                          300
                                                                                                                                    1029
                                                                                                                                                                                                                                                                                                789
              1209
                                                                                                                780
                                                                                                                                                                            969
                                                                                                                                                                                               660
                                                                                                                                                                                                                                       600
                                                                         840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ν
..
```

2280 2034	GATATCAACAATATAGACTATTACAAAAAGACCACCAATGGGCGGCTTCCAGTCAAGTGG		Qу
1974	AGAAATGTTTTGGTAACAGAAAACAATGTGATGAAAATAGCAGACTTTGGACTCGCCAGA.	2161 1915	Q у рь
2160 1914	CTGGCCAGAGGCATGGAGTACTTGGCTTCCCAAAAATGTATTCATCGAGATTTAGCAGCC		Qу Db
2100 1854	ATTAACCGTGTTCCTGAGGAGCAGATGACCTTCAAGGACTTGGTGTCATGCACCTACCAG		Qy Db
	GGCAACCTCCGAGAATACCTCCGAGCCCGGAGGCCACCCGGGATGGAGTACTCCTATGAC	1981 1735	Qy Db
1980 1734	CTTCTTGGAGCCTGCACACAGGATGGGCCTCTCTATGTCATAGTTGAGTATGCCTCTAAA	1921 1675	Qy Db
1920 1674	GATCTGGTGTCAGAGATGAGATGATGAGATGATTGGGAAACACAAGAATATCATAAAT 	1861 1615	Qy Db
1860 1614	GAGGCGGTCACCGTGGCCGTGAAGATGTTGAAAGATGATGCCACAGAGAAAAGACCTTTCT 	u o	Qy Db
1800 1554	GGTTGCTTTGGGCAAGTGGTCATGGCGGAAGCAGTGGGAATTGACAAAGACAAGCCCAAG	4 7	Qy Db
1740 1494	GAGGACCCAAAATGGGAGTTTCCAAGAGATAAGCTGACACTGGGCAAGCCCCTGGGAGAA	<i>a 4</i>	Qy dd
4 68 3	ACTTCCA ACTTCCA	1621 1375	Ωy
1620 1374	GTTTCGGCTGAGTCCAGCTCCTCCATGAACTCCAACACCCCGCTGGTGAGGATAACAACA	ωσ	ФФ
1 6	AGCAGCCAGCCGGCTGTGCACAAGCTGACCAAACGTATCCCCCTGCGGAGACAGGTAACA	NG	dd
	TGTATGGTGGTAACAGTCATCCTGTGCCGAATGAAGAACACGACCAAGAAGCCAGACTTC	1441 1195	Фр
	ACAGCTTCCCCAGACTACCTGGAGATAGCCATTTACTGCATAGGGGTCTTCTTAATCGCC	μ ω	Оу
1380 1134	CACTCTGCATGGTTGACAGTTCTGCCAGCGCCTGGAAGAGAAAAGGAGATT	1330 1075	Qy Db
1329 1074	TGGCGGGTAATTCTATTGGGATATCCTTT 	1270 1015	Qу Дъ
	AAGGCCGCCGGTGTTAACACCACGGACAAAGAGATTGAGGTTCTCTATATTCGGAATGTA :	1210 961	Qy Db
	CACGTGGAAAAGAACGGCAGTAAATACGGGCCCGACGGGCTGCCCTACCTCAAGGTTCTC 9	901	DЬ

2

```
RESULT 8
AAQ14849
ID AAQ1
XX AAQ1
AC AAQ1
XX AQ1
AC AAQ1
XX Huma
XX Huma
XX Huma
XX Huma
XX Homc
XX Hom
XX 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             õ
         A CUMA LIDRARY prepared from human cancer cell line Kato III mRNA was screened with an oligonucleotide corresponding to amino acids 529-541 of chicken basic FGF receptor. Three positive clones were obtained one was cloned into pUC118/119 to give pTB1228. The sequence of pTB1229 was the longest of the three clones. See AAQ14848 for pTB1228 which lacks nucleotides 134-478 and 1309-1314 of pTB1229 and has an A residue in stead of a T at the position corresponding to nucleotide 1029 of pTB1229.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         28-DEC-1990;
27-APR-1990;
31-JUL-1990;
14-SEP-1990;
                                                                                                                                                                                                                                                               New mutein(s) of proteins - with fibroblast growth factor receptor activity, useful for treating multiple endocrine neoplasia, prostatic hypertrophy, used for diagnosis
                                                                                                                                                                                                                              Example
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2281
                                                                                                                                                                                                                                                                                                                                                                                                                                  Igarashi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25-APR-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14-NOV-1991.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO9117183-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAQ14849 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-FEB-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAQ14849
                                                                                                                                                                                                                                                                                                                                                               1991-353723/48
DB; AAR15267.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGGGTGTTAATGTGGGAGATCTTCACTTTAGGGGGCTCGCCCTACCCAGGGATTCCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AACGAACTGTACATGATGATGAGGGACTGTTGGCATGCAGTGCCCTCCCAGAGACCAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATGGCTCCAGAAGCCCTGTTTGATAGAGTATACACTCATCAGAGTGATGTCTGGTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTCAAGCAGTTGGTAGAAGACTTGGATCGAATTCTCACTCTCACAACCAATGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTCAAGCAGTTGGTAGAAGACTTGGAATGGATCTCACCTCTCACAACCAATGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAGGAACTTTTTAAGCTGCTGAAGGAAGGACACAGAATGGATAAGCCCAGCCCAACTGCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PTB1229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            fibroblast growth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TAKEDA
                                                                                                                                                                                                                      2; Fig 4; 88pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                  ζ,
                                                                                                                                                                                                                                                                                                                                                                                                                               Senoo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       90JP-0415801.
90JP-0113146.
90JP-0204438.
90JP-0245256.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CHEMICAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        91WO-JP00557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
25..1953
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                               ĭ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   entry)
                                                                                                                                                                                                                                                                                                                                                                                                                               Watanabe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              factor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ×
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ВÞ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         with
                                                                                                                                                                                                                                                                                                                                                                                                                               7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2340
```

```
Ş
                       В
                                     Ω
                                                         망
                                                                      δÃ
                                                                                          밁
                                                                                                         δÔ
                                                                                                                            В
                                                                                                                                        Qy
                                                                                                                                                             밁
                                                                                                                                                                            δÃ
                                                                                                                                                                                               밁
                                                                                                                                                                                                              Qγ
                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                Ωy
                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                     δÃ
                                                                                                                                                                                                                                                                                                                                                                         B,
                                                                                                                                                                                                                                                                                                                                                                                      δõ
                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                        1150
       1210
                                                                         1090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                           1030
                        901
                                                         841
                                                                                          781
                                                                                                                            721
                                                                                                                                            970
                                                                                                                                                             661
                                                                                                                                                                             910
                                                                                                                                                                                               601
                                                                                                                                                                                                                850
                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                  790
                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                    730
                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                     670
                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                       610
                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                        550
                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                           490
                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                            430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
AAGGCCGCCGGTGTTAACACCACGGACAAAGAGATTGAGGTTCTCTATATTCGGAATGTA 1265
                   CACGTGGAAAAGAACGGCAGTAAATACGGGCCCGACGGGCTGCCCTACCTCAAGGTTCTC
                                                      GACGTAGAGTTTGTCTGCAAGGTTTACAGTGATGCCCAGCCCCACATCCAGTGGATCAAG
                                                                                       CCTCACCGGCCCATCCTCCAAGCCGGACTGCCGGCAAATGCCTCCACAGTGGTCGGAGGA
                                                                                                                                   GTGGAGAATGAATACGGGTCCATCAATCACACGTACCACCTGGATGTTGTGGAGCGATCG
                                                                                                                                                                   CACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCTGACAAGGGAAATTATACCTGTGTG
                                                                                                                                                                                                                             GCACCATACTGGACCAACACAGAAAAGATGGAAAAGCGGCTCCATGCTGTGCCTGCGGCC
                                                                                                                                                                                                                                                                                                 GCGCCAGGGGAGTCGCTAGAGGTGCGCTGCCTGTTGAAAGATGCCGCCGTGATCAGTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGACCGGGGATTGGTACCGTAACCATGGTCAGCTGGGGTCGTTTCATCTGCCTGGTCGTG
                                                                                                CCTCACCGGCCCATCCTCCAAGCCGGACTGCCGGCAAATGCCTCCACAGTGGTCGGAGGA
                                                                                                                                                                                            AAAAACGGGAAGGAGTTTAAGCAGGAGCATCGCATTGGAGGCTACAAGGTACGAAACCAG
                                                                                                                                                                                                                                                                                                                                            GTAGACAGTGAAACTTGGTACTTCATGGTGAATGTCACAGATGCCATCTCATCCGGAGAT
                                                                                                                                                                                                                                                                                                                                                                              CAGATAAAGGGCGCCACGCCTAGAGACTCCGGCCTCTATGCTTGTACTGCCAGTAGGACT
                                                                                                                                                                                                                                                                                                                                                                                                      ACTAAGGATGGGGTGCACTTGGGGCCCAACAATAGGACAGTGCTTATTGGGGAGTACTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGACCGGGGATTGGTACCGTAACCATGGTCAGCTGGGGTCGTTTCATCTGCCTGGTCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1887;
                                                                                                                         GTGGAGAATGAATACGGGTCCATCAATCACACGTACCACCTGGATGTTGTGGAGCGATCG
                                                                                                                                                           CACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCTGACAAGGGAAATTATACCTGTGTG
                                                                                                                                                                                                                                                                                                                                     GTAGACAGTGAAACTTGGTACTTCATGGTGAATGTCACAGATGCCATCTCATCCGGAGAT
                                                                                                                                                                                                                                                                                                                                                                      CAGATAAAGGGCGCCACGCCTAGAGACTCCGGCCTCTATGCTTGTACTGCCAGTAGGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1954 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  531 A; 481 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         42.6%;
96.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  544 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1817.2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  398 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DВ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 58;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1954;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                     960
                                      1209
                                                                       1149
                                                                                                         1089
                                                        900
                                                                                        840
                                                                                                                                          1029
                                                                                                                                                                                                                                              849
                                                                                                                                                                                                                                                                                                                                                                                                                                                         489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             369
                                                                                                                          780
                                                                                                                                                           720
                                                                                                                                                                           969
                                                                                                                                                                                            660
                                                                                                                                                                                                             909
                                                                                                                                                                                                                               600
                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                                                                                                     669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60
                                                                                                                                                                                                                                                                                 789
                                                                                                                                                                                                                                                                                                                   729
                                                                                                                                                                                                                                                                                                                                    420
                                                                                                                                                                                                                                                                                                                                                                     360
                                                                                                                                                                                                                                                                                                                                                                                      609
                                                                                                                                                                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                                                                                                                                                                        549
                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               309
```

밁

961

AAGCACTCGGGGATAAATAGTTCCAATGCAGAAGTGCTGGCTCTGTTC----

AATGTG

```
RESULT 9
AAQ14851
ID AAQ1
XX
AC AAQ1
XX
DT 18-F
                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                           ş
                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                   Š
                                                                                                                                                                       Š
                                                                                                                                                                                             В
                                                                                                                                                                                                            Š
                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                     Š
                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                               ş
                                                                                  밁
                                                                                              QΥ
                                                                                                                    Ф
                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                              1435
                                                                                                                                                                                                                                                                                                                                                                                                                                     1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1075
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1270
                                                                                                                                                                                                                                                                     1615
                                                                                                                                                                                                                                                                                                                                             1495
                                                                                                                                                                                                                                                                                                                                                             1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                       1315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1381
                                                                                  1915
                                                                                                                                                                                                                                                                                                                          1801
                                                                                                                                                                                                                                                                                                                                                                                                                   1375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1561
                                                                                                                                                                                                                                 1675
                                                                                                                                                                                                                                                                                      1861
                                                                                                                                                                                                                                                                                                                                                                                                 1681
 18-FEB-1992
                  AAQ14851;
                                                                                                                                                                                                                                                                     GATCTGGTGTCAGAGATGGAGATGATGAAGATGATTGGGAAACACAAGAATATCATAAAT
                                                                                                                                                                                                                                                                                                       GAGGCGGTCACCGTGGCCGTGAAGATGTTGAAAGATGATGCCACAGAGAAAGACCTTTCT
                                                                                                                                                                                                                                                                                                                                           CTGGCCAGAGGCATGGAGTACTTGGCTTCCCAAAAATGTATTCATCGAGATTTAGCAGCC
                                                                                                                                                                                                      GGCAACCTCCGAGAATACCTCCGAGCCCGGAGGCCACCCGGGATGGAGTACTCCTATGAC
                                                                                                                                                                                                                                                                                                                                                                                         GAGGACCCAAAATGGGAGTTTCCAAGAGATAAGCTGACACTGGGCAAGCCCCTGGGAGAA 1740
                                                                                                                                                                                                                                                                                                                                                                                                                             CGCCTCTCTTCAACGGCAGACACCCCCCATGCTGGCAGGGGTCTCCCGAGTATGAACTTCCA 1680
                                                                                 AGAAATGTTTTGGTAACAGAAAACAATGTGATGAAAATAG 2200
                                                                                                                                                                 ATTAACCGTGTTCCTGAGGAGCAGATGACCTTCAAGGACTTGGTGTCATGCACCTACCAG
                                                                                                                                                                                              GGCAACCTCCGAGAATACCTCCGAGCCCGGGAGGCCACCCGGGATGGAGTACTCCTATGAC
                                                                                                                                                                                                                                 CTTCTTGGAGCCTGCACACAGGATGGGCCTCTCTATGTCATAGTTGAGTATGCCTCTAAA
                                                                                                                                                                                                                                           CTTCTTGGAGCCTGCACACAGGATGGGCCTCTCTATGTCATAGTTGAGTATGCCTCTAAA
                                                                                                                                                                                                                                                                                                                                                                                GAGGACCCAAAATGGGAGTTTCCAAGAGATAAGCTGACACTGGGCAAGCCCCTGGGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                    CGCCTCTCCAACGGCAGACACCCCCCATGCTGGCAGGGGTCTCCGAGTATGAACTTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGCAGCCAGCCGGCTGTGCACAAGCTGACCAAACGTATCCCCCCTGCGGAGACAGGTAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGCAGCCAGCCGGCTGTGCACAAGCTGACCAAACGTATCCCCCCTGCGGAGACAGGTAACA
                                                                                                                                                         ATTAACCGTGTTCCTGAGGAGCAGATGACCTTCAAGGACTTGGTGTCATGCACCTACCAG
(first entry)
                                     DNA;
                                                                                                                                                                                                                                                  1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1329
                                                                                                                                                                                                                                 1734
                                                                                                                                                                                                                                                                      1674
                                                                                                                                                                                                                                                                                      1920
                                                                                                                                                                                                                                                                                                        1614
                                                                                                                                                                                                                                                                                                                          1860
                                                                                                                                                                                                                                                                                                                                                             1800
                                                                                                                                                                                                                                                                                                                                                                                1494
                                                                                                                                                                                                                                                                                                                                                                                                                    1434
                                                                                                                                                                                                                                                                                                                                                                                                                                                       1374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1500
                                                                                                                                       2160
                                                                                                                                                         1854
                                                                                                                                                                          2100
                                                                                                                                                                                              1794
```

```
Ş
                                                                                                                                          Ş
               δô
                                       В
                                                                               g . 8
                                                                                                                        Ъ
                                                                                                                                                                밁
                                                                                                                                                                                Ş
                                                                                                                                                                                                       ₽
                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28-DEC-1990;
27-APR-1990;
31-JUL-1990;
                                                                                                                                                                                                                                                                                                        A cDNA library prepared from human cancer cell line Kato III mRNA was screened with an oligonuclectide corresponding to amino acids 529-541 of chicken basic FGF receptor. Three positive clones were obtained. One was cloned into pUCl18/119 to give pTB1228 (see AAQ14848). The complete FGF coding sequence was obtained by ligating the insert from pTB1228 to the DNA sequence of the plasmid pTB1281 insert which encodes the carboxyl terminus of the FGF receptor from Glu 533 onwards.
                                                                                                                                                                                                                                                                                                                                                                                                                     New mutein(s) of proteins - with fibroblast growth factor receptor activity, useful for treating multiple endocrine neoplasia, prostatic hypertrophy, used for diagnosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1991-353723/48.
P-PSDB; AAR15269.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Clone
                                                                                                                                                                                                                                                                                       Sequence 2310 BP;
                                                                                                                                                                                                                                                                                                                                                                                                  Example 3; Fig 8; 88pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              P-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14-NOV-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO9117183-A
                    1028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (TAKE ) TAKEDA CHEMICAL IND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25-APR-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            [garashi
  434
                                        374
                                                           896
                                                                               314
                                                                                                   908
                                                                                                                        254
                                                                                                                                                                194
                                                                                                                                                                                    788
                                                                                                                                                                                                       134
                                                                                                                                                                                                                          728
CGCCTCACCGGCCCATCCTCCAAGCCGGACTGCCGGCAAATGCCTCCACAGTGGTCGGAG
                                                                                                                                                              CCAACACTGTCAAGTTTCGCTGCCCAGCCGGGGGGAACCCAATGCCAACCATGCGGTGGC
                                                                                                                                                                                                      GAGCACCATACTGGACCAACACACAAAAGATGGAAAAGCGGCTCCATGCTGTGCCTGCGG
                                                                             AGCACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCTGACAAGGGAAATTATACCTGTG
                                                                                                                        TGGTGGAGAATGAATACGGGTCCATCAATCACACGTACCACCTGGATGTTGTGGAGCGAT
                                                 TGGTGGAGAATGAATACGGGTCCATCAATCACACGTACCACCTGGATGTTGTGGAGCGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PTB1283
                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Senoo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   90JP-0415801.
90JP-0113146.
90JP-0204438.
90JP-0245256.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       91WO-JP00557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
25..1983
/*tag= a
                                                                                                                                                                                                                                                                                       629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             growth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ĭ
                                                                                                                                                                                                                                                        39.6%;
                                                                                                                                                                                                                                                                                      ?.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 complete
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Watanabe
                                                                                                                                                                                                                                                                                       566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              factor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  줐
                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                        Score 1689.6;
Pred. No. 0;
                                                                                                                                                                                                                                                                                      C; 636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FGF
                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                      G; 479 T; 0 other;
                                                                                                                                                                                                                                                                   DB 12;
                                                                                                                                                                                                                                                59;
                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                21;
                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                   847
                                                                                                                                                                                                        193
                                                                                                                                                                                                                            787
                                         433
                                                                                 373
                                                                                                    967
                                                                                                                        313
                                                                                                                                            907
                                                                                                                                                                253
```

w

멍

```
밁
   밁
                 Ş
                                В
                                           Q
                                                                          Qy
                                                                                          рb
                                                                                                      δõ
                                                                                                                       뮻
                                                                                                                                    Ş
                                                                                                                                                    В
                                                                                                                                                                  γQ
                                                                                                                                                                                                              밁
                                                                                                                                                                                                                          Š
                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                 В
                                                                                                                                                                                              Q
                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                       δõ
                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                 γ
                                                                                                                                                                                                                                                                                                                                                               DЪ
                                                                                                                                                                                                                                                                                                                                                                             Q
                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                      Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    β
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
   1502
                  2099
                                1442
                                                             1382
                                               2039
                                                                                                         1919
                                                                                                                                                                   1799
                                                                                                                                                                                 1142
                                                                            1979
                                                                                                                       1262
                                                                                                                                      1859
                                                                                                                                                    1202
                                                                                                                                                                                                1739
                                                                                                                                                                                                               1082
                                                                                                                                                                                                                                            1022
                                                                                                                                                                                                                                                          1619
                                                                                                                                                                                                                                                                                                                    1499
                                                                                                                                                                                                                              1679
                                                                                                                                                                                                                                                                                        1559
                                                                                                                                                                                                                                                                                                                                                                                1379
                                                                                                                                                                                                                                                                                                                                                                                                            1328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1088
                                                                                                                                                                                                                                                                                                      806
                                                                                                                                                                                                                                                                                                                                   848
                                                                                                                                                                                                                                                                                                                                                                788
                                                                                                                                                                                                                                                                                                                                                                                              728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  494
                                                                                                                                                                                                                                                                                                                                                                                                                           899
                                                                                                                                                                                                                                                                                                                                                                                                                                                        614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     554
CTGATCTGGTGTCAGAGATGGAGATGATGAAGATGATTGGGAAACACAAGAATATCATAA
                                                                                                                                                 AGGAGGCGGTCACCGTGGCCGTGAAGATGTTGAAAGATGATGCCACAGAGAAAAGACCTTT
                                                                                                                                                                              CAGAGGACCCAAAATGGGAGTTTCCAAGAGATAAGCTGACACTGGGCAAGCCCCTGGGAG
                                                                                                                                                                                                                                        CACGCCTCTTCAACGGCAGACACCCCCATGCTGGCAGGGGTCTCCGGAGTATGAACTTC
                                                                  AAGGCAACCTCCGAGAATACCTCCGAGCCCGGAGGCCACCCGGGATGGAGTACTCCTATG
                                                                                               ATCTTCTTGGAGCCTGCACACAGGATGGGCCCTCTCTATGTCATAGTTGAGTATGCCTCTA
                                                                                                                    CTGATCTGGTGTCAGAGATGGAGATGATGAAGATTGGGAAACACAAGAATATCATAA
                                                                                                                                                                                                                                                                                                   GAGACGTAGAGTTTGTCTGCAAGGTTTACAGTGATGCCCAGCCCCAGATCCAGTGGATCA
                                                          AAGGCAACCTCCGAGAATACCTCCGAGCCCGGGAGGCCACCCGGGATGGAGTACTCCTATG
                                                                                       ATCTTCTTGGAGCCTGCACACAGGATGGGCCTCTCTATGTCATAGTTGAGTATGCCTCTA
                                                                                                                                                                                                                                                                                                                                                                                           TTCACTCTGCATGGTTGACAGTTCTGCC-----AGCGCCTGGAAGAGAAAGGAGA 1378
                                                                                                                                                                                                                                                                                                                                                                                                                        TGACCGAGGCGGATGCTGGGGAATATATATGTAAGGTCTCCAATTATATAGGGCAGGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                 TAACTTTTGAGGACGCTGGGGAATATACGTGCTTGGCGGGTAATTCTATTGGGATATCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCAAGGCCGCCGGTGTTAACACCACGGACAAGAGATTGAGGTTCTCTATATTCGGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGCACGTGGAAAAGAACGGCAGTAAATACGGGCCCGACGGGCTGCCCTACCTCAAGGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCAAGCACTCGGGGATAAATAGTTCCAATGCAGAAGTGCTGGCTCTGT-----TCAATG
                                                                                                      1978
                                                                                                                                                                1858
                                                                                                                                                                                                                                                                                                                   1558
                                                                                                                                    1918
                                                                                                                                                                                             1798
1561
               2158
                             1501
                                            2098
                                                           1441
                                                                         2038
                                                                                                                                                  1261
                                                                                                                                                                               1201
                                                                                                                                                                                                             1141
                                                                                                                                                                                                                          1738
                                                                                                                                                                                                                                          1081
                                                                                                                                                                                                                                                         1678
                                                                                                                                                                                                                                                                       1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1147
                                                                                                                                                                                                                                                                                     1618
                                                                                                                                                                                                                                                                                                                                               1498
                                                                                                                                                                                                                                                                                                                                                                             1438
                                                                                                                                                                                                                                                                                                                                                                                                                                        1327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1207
                                                                                                                                                                                                                                                                                                    963
                                                                                                                                                                                                                                                                                                                                  907
                                                                                                                                                                                                                                                                                                                                                              847
                                                                                                                                                                                                                                                                                                                                                                                                                         727
                                                                                                                                                                                                                                                                                                                                                                                                                                                     667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   613
                                                                                                                                                                                                                                                                                                                                                                                            787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 553
```

```
RESULT 10
AAQ14049
Ş
                                                                                                                                                                                                                                                                                                           Qγ
                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                           맑
                                                                                                                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                 17-DEC-2001
09-JAN-1992
                       New genetic cloning directional cloning
                                                                                                                                                                         Key
                                                                                                                                                                                                                                                                                                             2519
            Disclosure;
                                                               Miki
                                                                                                                                                                                                                                                                AAQ14049 standard;
                                                                                                                                                                                                                                                                                                                                      2459
                                                                                                                                                                                                                                                                                                                                                  1802
                                                                                                                                                                                                                                                                                                                                                                           1742
                                                                                                                                                                                                                                                                                                                                                                                       2339
                                                                                                                                                                                                                                                                                                                                                                                                    1682
                                                                                                                                                                                                                                                                                                                                                                                                                2279
                                                                                                                                                                                                                                                                                                                                                                                                                             1622
                                                                                                                                                                                                                                                                                                                                                                                                                                          2219
                                                                                                                                                                                                                                                                                                                                                                                                                                                       1562
                                                                          (USSH)
                                                                                                    09-AUG-1990;
                                                                                                                              USN7560035-N
                                                                                                                                               sig_peptide
                                                                                                                                                           mat_peptide
                                                                                                                                                                                            Homo
                                                                                                                                                                                                        Keratinocyte
                                                                                                                                                                                                                     Human
                                                                                                                                                                                                                                                     AAQ14049;
                                                                                                                                                                                                                                                                                                 1922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2159
                                                                                                                 10-SEP-1991.
                                           1991-310282/42.
DB; AAR14280.
                                                              'n
                                                                                                                                                                                           sapiens
                                                                                                                                                                                                                                                                                              CGTTCAAGCAGTTGGTAGAAGACTTGGATCGAATTCTCACTCTCACAACCAATGAG
                                                                                                                                                                                                                                                                                                                      GAGATATCAACAATATAGACTATTACAAAAAGACCACCAATGGGCGGCTTCCAGTCAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCAGAAATGTTTTGGTAACAGAAAACAATGTGATGAAAATAGCAGACTTTGGACTCGCCA
                                                                                                                                                                                                                                                                                                                                                                         TCGGGGTGTTAATGTGGGAGATCTTCACTTTAGGGGGGCTCGCCCTACCCAGGGATTCCCG
                                                                                                                                                                                                                                                                                                                                                                                TCGGGGTGTTAATGTGGGAGATCTTCACTTTAGGGGGCTCGCCCTACCCAGGGATTCCCG
                                                                                                                                                                                                                    ect gene
                                                                           NAT
                                                              Aaronson
          Fig
                                                                          INST
                                                                                                                                                                                                        growth
                                                                                                                                                                                                                                (updated)
(first entry)
                                                                                                                                        Location/Qualifiers
130.2310
/*tag= a
250.2307
/*tag= b
187.249
/*tag= c
                                                                                       9005-0560035
                                                                                                   90US-0560035
          15; 108pp; English.
                                                                          ç
                                                             SA,
                                                                                                                                                                                                                                                                cDNA;
                       vectors - which of cDNA copy of
                                                                          HEALTH
                                                                                                                                                                                                        factor
                                                             Fleming
                      cDNA copy
                                                                                                                                                                                                                                                                2345
                                                                                                                                                                                                       receptor; KGF; tyrosine kinase;
                                                                                                                                                                                                                                                                ΒP
                                                             ij
                                                                                                                                                                                                                                                                                  -
                       of a
                      provide efficient, f a eukaryotic mRNA
                             automatic
                                                                                                                                                                                                                                                                                               1977
                                                                                                                                                                                                                                                                                                                                                             2458
                                                                                                                                                                                                                                                                                                                                                                                                  1741
                                                                                                                                                                                                                                                                                                                                                1861
                                                                                                                                                                                                                                                                                                                                                                         1801
                                                                                                                                                                                                                                                                                                                                                                                                               2338
                                                                                                                                                                                                                                                                                                                                                                                                                            1681
                                                                                                                                                                                                                                                                                                                                                                                     2398
                                                                                                                                                                                                                                                                                                                                                                                                                                        2278
                                                                                                                                                                                                                                                                                                                                                                                                                                                     1621
```

The

sequence

obtd.

from a clone isolated

from

a cDNA library

```
da
da
                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                             δ
밁
          9
                         DЬ
                                        Ş
                                                           β Q
                                                                                          ρ
δ
                                                                                                                   В
6
                                                                                                                                                   g Qy
                                                                                                                                                                                  밁
                                                                                                                                                                                             Ş
                                                                                                                                                                                                             유 양
                                                                                                                                                                                                                                         da
                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                           ФФ
                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                맑
                                                                                                                                                                                                                                                                                                                                                                                                                               Query Ma
Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         prepd. in a new cloning vector, lambda pCEV27. The library was prepd. from RNA extracted from BALB/MK epidermal keratinocytes. The etcl gene was present on a 4.2 kb transcript. Two initiation codons are present, although the second is thought to be the most likely candidate. The protein encoded by the sequence is described in AAR14280.
1070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (Note: Revised entry submitted to correct the patent number fo US Government-owned NTIS applications to prevent clashes with granted patent numbers. For further information please visit tweb site at www.derwent.com/dwpi/updates/ntis_us.html.)
              1499
                                                                                                                                                                                                                                                              1028
                                                                                                                                                                    1208
                                                                                                                                                                                                                                               596
                                                                                                                                                                                                                                                                                                          476
                                                                                                                                                                                                                                                                                                                                       416
                                                                                                                                                                                                                                                                                                                                                                                   788
                                                                                                                                                                                                                                                                                                                                                                                                                 728
                                                                                                                                                                                                                                                                                           968
                                                                                                                                                                                                                                                                                                                                                                                                  296
                                                                                                                                                                                                                                                                                                                                                                                                                                               Match
                                                                                                                                                                                                                                                                                                                                                                                                          GAGCACCATACTGGACCAACACAGAAAAGATGGAAAAGCGGCTCCATGCTGTGCCTGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                 1814;
CCTGTATGGTGGTAACAGTCATCCTGTGCCGAATGAAGAACACGACCAAGAAGCCAGACT
                                                           TTCACTCTGCATGGTTGACAGTTCTGCC------AGCGCCTGGAAGAGAAAAGGAGA
                                                                                                                      AGCACGTGGAAAAGAACGGCAGTAAATACGGGCCCGACGGGCTGCCCTACCTCCAAGGTTC
                                                                                                                                                                                                                 CACCACACCGGCCCATCCTCCAAGCTGGACTGCCTGCAAATGCCTCCACGGTGGTCGGAG
                                                                                                                                                                                                                                                      CGCCTCACCGGCCCATCCTCCAAGCCGGACTGCCGGCAAATGCCTCCACAGTGGTCGGAG
                                                                                                                                                                                                                                                                            AGCACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCTGACAAGGGAAATTATACCTGTG
                                                                                                                                                                                                                                                                                                                                      CCAACACTGTGAAGTTCCGCTGTCCGGCTGGGGGGAATCCAACGCCCACAATGAGGTGGT
                                                                                                                                                                                                                                                                                                                                                                            CCAACACTGTCAAGTTTCGCTGCCCAGCCGGGGGGAACCCAATGCCAACCATGCGGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                  GAGCACCGTACTGGACCAACACCGAGAAGATGGAGAAGCGGCTCCACGCTGTCCCTGCCG
                                                                                          ACCAGTCTGCCTGCCTGTCCTGCCCAAACAGCAGCCTGTGAGAGAAGAAGGAGGAGA
                                                                                                                                                                                    AGCACGTGGAAAAGAACGGCAGTAAATACGGGCCTGATGGGCTGCCCTACCTCAAGGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                               2345
                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP; 621 A; 602 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                        38
88
                                                                                                                                                                                                                                                                                                                                                                                                                                       3.50
                                                                                                                                                                                                                                                                                                                                                                                                                              Score 1642.8; pred. No. 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                0:
                                                                                                                                                                                                                                                                                                                                                                                                                                                              634 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               488
                                                                                                                                                                                                                                                                                                                                                                                                                                              .
œ
                                                                                                                                                                                                                                                                                                                                                                                                                                                              T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                 227;
                                                                                                                                                                                                                                                                                                                                                                                                                                                DВ
                                                                                                                                                                                                                                                                                                                                                                                                                                               12;
                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          the most
described
                                                                                                                                                                                                                                                                                                                                                                                                                                 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    format of
th ongoing US
t the Derwent
                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                         1378
                                                                                                                                                                                                                                1147
                                                                                                                                                                                                                                                                            595
                                                                                                                                                                                                                                                                                           1027
                                                                                          949
                                                                                                                        889
                                                                                                                                                                                                                 715
                                                                                                                                                                                                                                                             1087
                                                                                                                                                                                                                                                                                                          535
                                                                                                                                                                                                                                                                                                                         967
                                                                                                                                                                                                                                                                                                                                                      907
                                                                                                                                                                                                                                                                                                                                                                                    847
                                                                                                                                      1327
                                                                                                                                                      829
                                                                                                                                                                                                                                               655
                                                                                                                                                                                                                                                                                                                                                                                                                                 Ņ
                                                                                                                                                                                                                                                                                                                                                          δÕ
                                                                                                                                                                                                                                                                                                                                                                           Вb
                                                                                                                                                                                                                                                                                                                                                                                       δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                   VQ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ρy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                        δÃ
                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                           δõ
                                                                                                                                                                                                                                                                                                                                              망
                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qy
                                               Qy
                                                                  ₽
                                                                              δÃ
                                                                                                В
                                                                                                            ν
                                                                                                                               В
                                                                                                                                          Š
                                                                                                                                                             밁
                                                                                                                                                                         δõ
                                                                                                                                                                                       몽
                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                   δõ
                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                 οy
       밁
                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1190
                                                                                2459
                                                                                                                                                                                           1790
                                                                                                                                                                                                                                       2159
                                                                                                                                                                                                                                                                                                                                               1490
                                                                                                                                                                                                                                                                                                                                                              1919
                                                                                                                                                                                                                                                                                                                                                                                                                                                       1739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1559
                                                                                                  1970
                                                                                                                               1910
                                                                                                                                                             1850
                                                                                                                                                                                                                                                                                    1610
                                                                                                                                                                                                                                                     1670
       150
```

CAGAGGACCCAAAATGGGAGTTTCCAAGAGATAAGCTGACACTGGGCAAGCCCCTGGGAG AAGGCAACCTCCGAGAATACCTCCGAGCCCGGAGGCCACCCGGGATGGAGTACTCCTATG CGTTCAAGCAGTTGGTAGAAGACTTGGATCGAATTCTCACTCTCACAACCAATGAGGAAT AGCTGGCCAGAGGCATGGAGTACTTGGCTTCCCAAAAATGTATTCATCGAGATTTAGCAG 1849 1669 2098 1609 1549 1978 1918 1858 1249 1678 1618 1969 2218 1729 2158 2038 2578 2518 2029 2458 2398 1909 2338 2278 2638 2149

```
RESULT 11
AAQ10868
ID AAQ10
AC AAQ1(
CXX AQ1(
CXX AQ1(
CXX CACA)
CXX KGF
XXX KGF
XXX KGF
XXX KGF
XXX FT S19,
FT mat
FT mat
FT M4;
XXX AQ1(
CCC
CCC
CCC
XXX
SQ
                  Ş
                                    ₽
                                                    á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                        Matches
                                                                                                                                                                                                             Efficient of eukaryo
                                                                                                                          The ectl sequence encoding the KGF receptor was obtd. from a clone isolated from a BALB/MK epidermal keratinocyte DNA library prepd. using the lambda pcEV27 cloning sysem of the invention. The protein appears to typical transmembrane tyrosine kinase (see AAR10933 for details), closely related to the mouse bFGF receptor. See also AAQ10867.
                                                                                                           Sequence
                                                                                                                                                                                           Disclosure;
                                                                                                                                                                                                                                                                                    (USDC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2330
                                                                                                                                                                                                                                                                                                      28-JUL-1989;
                                                                                                                                                                                                                                                                                                                                                            WO9102077-A
                                                                                                                                                                                                                                                                                                                                                                                              mat_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2210
                   788
                                    296
                                                                                                                                                                                                                                                                                                                        30-JUL-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                sig_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Keratinocyte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 09-MAY-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAQ10868 standard;
                                                                                                                                                                                                        ficient genetic cioning system - useful for cloning cDNA copies eukaryotic mRNAs of all sizes and for library preparation
    CCAACACTGTCAAGTTTCGCTGCCCAGCCGGGGGGAACCCAATGCCAATGCGATGCGGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                            musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              receptor
                               GAGCACCGTACTGGACCAACACCGAGAAGATGGAGAAGCGGCTCCACGCTGTCCCTGCCG 355
                                          GAGCACCATACTGGACCAACACAGAAAAGATGGAAAAGCGGCTCCATGCTGTGCCTGCGG 787
                                                                        eal Similarity
1814; Conser
                                                                                                                                                                                                                                                 1991-073549/10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCCAAACAGGACAGCA 2345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCCAAACAGGACAGCA 2774
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SD
                                                                                                           2345
                                                                                                                                                                                                                                                                 Aaronson
                                                                       Conservative
                                                                                                                                                                                         Fig 15a; 103pp; English.
                                                                                                          BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            growth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first
                                                                                                                                                                                                                                                                                   ဝှု
                                                                                                                                                                                                                                                                                                    89US-0386053
                                                                                                                                                                                                                                                                                                                        90WO-US04239
                                                                                                                                                                                                                                                                                                                                                                            /*tag=
..2307
/*tag=
/label=
                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers 187..249
                                                                                                         621 A;
                                                                                                                                                                                                                                                                 SA,
                                                                                                                                                                                                                                                                                   COMMERCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cDNA;
                                                                            38.5%;
88.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            factor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               entry)
                                                                                                                                                                                                                                                                Fleming
                                                                                                                                                                                                                                                                                                                                                                           KGF
                                                                                                                                                                                                                                                                                                                                                                                                       D
                                                                                                          602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2345
                                                                       0;
                                                                    Score 1642.8;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                           receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ect1;
                                                                                                         Ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ВP
                                                                                                                                                                                                                                                                 н
                                                                                                        634 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           tyrosine
                                                                                                         488
                                                                                                         Η.
                                                                     227;
                                                                                      DB 12;
                                                                                                        0
                                                                                                        other;
                                                                     Indels
                                                                                      Length
                                                                     15;
                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2269
                                                                    2
     밁
                 Qy
                                       밁
                                                      δõ
                                                                         Вþ
                                                                                          ρ
                                                                                                              밁
                                                                                                                             οy
                                                                                                                                                                 δ
                                                                                                                                                                                     В
                                                                                                                                                  밁
                                                                                                                                                                                                     Qγ
                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                  QΥ
                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                    Q
                                                                                                                                                                                                                                                                                                                                                                        망
                                                                                                                                                                                                                                                                                                                                                                                        δõ
                                                                                                                                                                                                                                                                                                                                                                                                           ДЬ
                                                                                                                                                                                                                                                                                                                                                                                                                           δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                  1190
                                                                                                                                                                                      1130
                                                                                                                                                                                                                                            1499
                                                                                                                                                                                                                                                             1010
                                                                                                                                                                                                                                                                               1439
                                                                                                                                                                                                                          1070
                                                                                                                                                                                                                                                                                                                                                                                                                             1208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1028
                                                                                                                                                                                                                                                                                                                                                      1328
                                                                                                                                                                                                                                                                                                  950
                                                                                                                                                                                                                                                                                                                                                                         830
                                                                                                                                                                                                                                                                                                                                                                                                           776
                                                                                                                                                                                                                                                                                                                                                                                                                                                716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      356
CACGCCTCTCTTCAACGGCAGACACCCCCATGCTGGCAGGGGGTCTCCGGAGTATGAACTTC
                                                                                                                                                                                 AGGAGGCGGTCACCGTGGCAGTGAAGATGTTGAAAGATGATGCCACAGAGAAGGACCTGT
                                              AGGAGGCGGTCACCGTGGCCGTGAAGATGTTGAAAGATGATGCCACAGAGAAAAGACCTTT
                                                                                                           CAGAGGACCCAAAATGGGAGTTTCCAAGAGATAAGCTGACACTGGGCAAGCCCCTGGGAG
                                                                                                                                              CGCGTCTGTCCTCAACAGCGGACACCCCGATGCTAGCAGGGGGTCTCCGAGTATGAGTTGC
                                                                                                                                                                                                                     TCAGCAGCCAGCCGGCTGTGCACAAGCTGACCAAACGTATCCCCCTGCGGAGACAGGTAA
                                                                                                                                                                                                                                                        CCTGTATGGTGGTAACAGTCATCCTGTGCCGAATGAAGAÁCACGACCAAGAAGCAGACT 1498
                                                                                                                                                                                                                                                                                            TTCACTCTGCATGGCTTGACAGTTCTGCC------AGCGCCTGGAAGAGAAAAGGAGA 1378
                                                                                                                                                                                                                                                                                                                                                                              TAACTTTTGAGGACGCTGGGGAATATACGTGCTTGGCGGGTAATTCTATTGGGATATCT 1327
                                                                                                                                                                                                                                                                                                                                                                                                                                           AGCACGTGGAAAAGAACGGCAGTAAATACGGGCCCGACGGGCTGCCCTACCTCAAGGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGCCTCACCGGCCCATCCTCCAAGCCGGACTGCCGGCAAATGCCTCCACAGTGGTCGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGAAGCACTCGGGGATAAATAGCTCCAATGCAGAAGTGCTGGCTCTGTTC----AATG
                                                                                                                                                                                                                                                                                                                                                                                                                   TCAAGGCCGCCGGTGTTAACACCACGGACAAAGAGATTGAGGTTCTCTATATTCGGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGCACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCTGACAAGGGAAATTATACCTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCAACACTGTGAAGTTCCGCTGTCCGGCTGGGGGGAATCCAACGCCCCACAATGAGGTGGT
                                                                                                                                                                                                                                                                                                                                                                     TGACGGAGATGGATGCTGGGGAATATATATGTAAGGTCTCCAATTATATAGGGCAGGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGCACTGGAGCCTTATTATGGAAAGTGTGGTCCCGTCAGACAAAGGCAACTACACCTGCC
```

1918

1858

1798 1309 1738 1249 1678 1618 1129 1009

949

889

1267

829

1207

775

1087

595

475 967

907

655

factor;

```
RESULT 12
AAV19076
ID AAV19
XX AAV19
AC AAV19
DT 28-JU
DT 28-JU
DX XX
KW Newt;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1490
                                                                                                                                                                                                                                                                                                                                                                                                                                         1910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1919
                                                                                                                                                                                                                                                                                                                                                      2030
                                                                                                                                                                                                                                                                                                                                                                          2459
                                                                                                                                                                                                                                                                                                                                                                                                                    2399
                                                                                                                                                                                                                                                                                                                                                                                                                                                             2339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2279
                                                                                                                                        2330
                                                                                                                                                             2759
                                                                                                                                                                                   2270
                                                                                                                                                                                                                           2210
                                                                                                                                                                                                                                                2639
                                                                                                                                                                                                                                                                    2150
                                                                                                                                                                                                                                                                                        2579
                                                                                                                                                                                                                                                                                                             2090
                                                                                                                                                                                                                                                                                                                                  2519
                                                                                                                                                                                                                                                                                                                                                                                                1970
Newt; fibroblast growth factor receptor-2; FGFR-2; cell line;
                      Fibroblast growth factor receptor-2 nucleotide sequence
                                           28-JUL-1998
                                                                                     AAV19076 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATCTTCTTGGAGCCTGCACACAGGATGGGCCTCTCTATGTCATAGTTGAGTATGCCTCTA 1978
                                                                                                                                                                                                                                                                                                             GAGATATCAACAATATAGACTATTACAAAAAGACCACCAATGGGCGGCTTCCAGTCAAGT 2278
                                                                                                                                                                                                                                                                                                                                                                         CCAACGAACTGTACATGATGATGAGGGACTGTTGGCATGCAGTGCCCTCCCAGAGACCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCGGGGTGTTAATGTGGGAGATCTTCACTTTAGGGGGCTCGCCCTACCCAGGGATTCCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGCTGGCCAGAGGCATGGAGTACTTGGCTTCCCAAAAATGTATTCATCGAGATTTAGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACATTAACCGTGTCCCCGAGGAGCAGATGACCTTCAAGGACTTGGTGTCCTGCACCTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACATTAACCGTGTTCCTGAGGAGCAGATGACCTTCAAGGACTTGGTGTCATGCACCTACC 2098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGGCAACCTCCGGGAATACCTCCGAGCCCGGAGGCCACCTGGCATGGAGTACTCCTATG 1609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAGGCAACCTCCGAGAATACCTCCGAGGCCGGAGGCCACCCGGGATGGAGTACTCCTATG
                                                                                                                                                           CCCAAACAGGACAGCA 2774
                                                                                                                                                                                               CTTGTTCTTCAGGGGACGATTCTGTGTTTTTCTCCAGACCCCATGCCTTATGAACCCTGTC
                                                                                                                                                                                                                                     CTTGTTCTTCAGGAGATGATTCTGTTTTTTCTCCAGACCCCATGCCTTACGAACCATGCC
                                                                                                                                                                                                                                                                     ACTTGGATCTCACCCAGCCTCTCGAACAGTATTCTCCTAGTTACCCCGACACAAGGAGCT
                                                                                                                                                                                                                                                                               ACTTGGACCTCAGCCAACCTCTCGAACAGTATTCACCTAGTTACCCTGACACAAGAAGTT
                                                                                                                                                                                                                                                                                                                                                       CCAATGAACTGTACATGATGAGGGGATTGCTGGCATGCTGTACCCTCACAGAGACCCA
                                                                                                                                                                                                                                                                                                                                                                                               TGGAGGAACTTTTTAAGCTGCTCAAAGAGGGACACAGGATGGACAAGCCCAACTGCA
                                                                                                                                                                                                                                                                                                                                                                                                           TCGGGGTGTTAATGTGGGAGATCTTTACTTTAGGGGGGCTCACCCTACCCAGGGATTCCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGGATATCAACAACATAGACTACTATAAAAAGACCACAAATGGGCGACTTCCAGTCAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCAGAAATGTTTTGGTAACAGAAAACAATGTGATGAAAATAGCAGACTTTGGACTCGCCA 2218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGCTGGCTAGAGGCATGGAGTACTTGGCTTCCCAAAAATGTATCCATCGAGATTTGGCTG
                                                                                                                                        CCCAAACAGGACAGCA 2345
                                                                                                                                                                                   TGCCTCAGTATCCACACATAAACGGCAGTGTTAAAACATGAGTGAATGTCTTTCCTGTC
                                           (first entry)
                                                                                     CDNA;
                                                                                     2675
                                                                                      ВP
   ds;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2158
                                                                                                                                                                                                                                                                                                                                                                             2518
                                                                                                                                                                                                                                                                                                                                                                                                                     2458
                                                                                                                                                                                                                                                                                                                                                                                                                                          1969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1669
                                                                                                                                                                                                        2758
                                                                                                                                                                                                                                                                                         2638
                                                                                                                                                                                                                                                                                                               2149
                                                                                                                                                                                                                                                                                                                                  2578
                                                                                                                                                                                                                                                                                                                                                        2089
                                                                                                                                                                                   2329
                                                                                                                                                                                                                             2269
                                                                                                                                                                                                                                                 2698
                                                                                                                                                                                                                                                                     2209
                                                                                                                                                                                                                                                                                                                                                                                                  2029
                                                                                                                                                                                                                                                                                                               Š
                                                                                                                                                            Ş
                                                                                                                                                                                    Ъ
                                                                                                                                                                                                     õ
                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                Š
                                Ş
                                                     망
                                                                          Š
                                                                                               밁
                                                                                                                                         В
                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 1654; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Key
5'UTR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Chiu IM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3'UTR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Notophthalmus viridescens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28-MAY-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28-MAY-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12-MAY-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US5750365-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           recombinant protein; wound
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (OHIS ) UNIV OHIO STATE RES
                                  948
                                                       669
                                                                                                609
                                                                                                                    828
                                                                                                                                          549
                                                                                                                                                              768
                                                                                                                                                                                     492
                                                                                                                                                                                                        708
                                                                                                                                                                                                                             432
               729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1998-296766/26.
DB; AAW37804.
                         CGGCTTCAAGGTACGTAGTCAACACTTCAGCCTGATCATGGAGAGCGTGGTTCCCTCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Poulin ML;
                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9308-0070165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            93US-0070165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /*tag= b
/product= ".
2515..2675
/*tag= c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /*tag= a
324..2514
                                                                                                                                                                                                                                                                              32.0%;
79.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           healing; fibroblast growth
```

Ş

밁 Š 밁 õ 밁

Ъ õ g

õ В õ

ô

밁 Ş 밁

. р Ş 밁 Ş 밁 á 밁 δÃ В S 망 ş 밁 9

```
This cDNA clone comprises the nucleotide sequence encoding the fibroblast growth factor receptor -2 (FGER-2) isolated from the regenerating forelimb blastema of an adult Notophkalmus viridscens (newt). It is part of the multigene family of FGFR involved in the expression of fibroblast growth factors (FGF) eg. acidic-FGF (aFGF). The cDNA clone is used for producing recombinant newt afFGF, which can be used to promote growth of cultured cell lines, e.g. cell lines used to produce other recombinant proteins, or to promote wound healing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A cDNA clone, useful for producing recombinant protein - con DNA sequence coding Notophthalmus viridscens (newt) acidic fibroblast growth factor (aFGF)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Columns 27-32; 44pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 2675 BP; 684 A; 716 C; 705 G; 570 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    648 AGATGCCATCTCATCCGGAGATGATGAGAGATGACACCGATGGTGCGGAAGATTTTTGTCAG 707
                                                                                                                                                                                                                                                                                                                  AGGCTACAAGGTACGAAACCAGCACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCTGA
                                                                                                                   AATGCCAACCATGCGGTGGCTGAAAAACGGGAAGGAGTTTAAGCAGGAGCATCGCATTGG
                                                                                                                                                                                                     ACTCCATGCTGTGCCGCTGCCAACACTGTGAAGTTCCGCTGTCCAGCCGGTGGCAACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                        AGATGCAAACTCATCAGGGGATGATGAAGACGACGACGACGGCTCGGAAGATTTCACAAA 491
                                                                                        TACGCCCTCCATGAGGTGGCTGAAGAACGGCAAGGAGTTCAAGCAGGAGCACCGCATTGG
                                                                                                                                                                                                                                                           GCTCCATGCTGTGCCTGCGGCCAACACTGTCAAGTTTCGCTGCCCAGCCGGGGGGAACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "newt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pred. No. 0;
0; Mismatches 429; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 1367.6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FGFR-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                 947
                                                                                           668
                                                                                                                                                    887
                                                                                                                                                                                                        608
                                                                                                                                                                                                                                                                  827
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               <u>ب</u>
```

```
В
                                                                                                                                                                                           В
                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                     망
                                                                                                                                                                                                                                                        δõ
                                                                                                                                                                                                                                                                                               QY
                                                                                                                                                                                                                                                                                                                         ₽
                                                                                                                                                                                                                                                                                                                                           Š
                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                  Q
                                                                                                                                                                                                                                                                                                                                                                                                         뫄
                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ωy
                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
   2088
                        1803
                                                                                     1968
                                                                                                                                                   1623
                                                                                                                                                                                                                 1788
                                                                                                                                                                                                                                       1503
                                                                                                                                                                                                                                                           1728
                                                                                                                                                                                                                                                                                1443
                                                                                                                                                                                                                                                                                                    1668
                                                                                                                                                                                                                                                                                                                                                                  1323
                                                                                                                                                                                                                                                                                                                                                                                      1548
                                                                                                                                                                                                                                                                                                                                                                                                           1263
                                                                                                                                                                                                                                                                                                                                                                                                                                                     1203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1368
                                                                                                          1683
                                                                                                                               1908
                                                                                                                                                                       1848
                                                                                                                                                                                            1563
                                                                                                                                                                                                                                                                                                                                              1608
                                                                                                                                                                                                                                                                                                                                                                                                                               1488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        789
                                                                                                     GAGGATAACAACACGCCTCTTCAACGGCAGACACCCCCATGCTGGCAGGGGTCTCCGA 1667
                                                                                                                                                                                                                                                                                                                                                             ATGCACCTACCAGCTGGCCAGAGGCATGGAGTACTTGGCTTCCCAAAAATGTATTCATCG
                                                                         GTATGCCTCTAAAGGCAACCTCCGAGAATACCTCCGAGCCCGGAGGCCACCCGGGATGGA
                                                                                                                                                                                        GACCOGCCCAAAGATGCAGCGACCGTGGCAGTGAAAGATGCTGAAAGACGATGCAACCGA
                                                                                                                                                                                                                                              GCCCCTGGGAGAAGGTTGCTTTGGGCAAGTGGTCATGGCGGAAGCAGTGGGGAATTGACAA 1787
                                                                                                                                                                                                                                                                                         GTATGAACTTCCAGAGGACCCAAAATGGGAGTTTCCAAGAGATAAGCTGGCCACTGGGCAA 1727
                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTTCTTAATCGCCTGTATGGTGGTAACAGTCATCCTGTGCCGAATGAAGAACACGACCAA 1487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTACTCCTTTGACATCAACAGAATTCCTGAAGAGCAGATGACCTTCAAGGACCTAGTGTC
                               GTACTCCTATGACATTAACCGTGTTCCTGAGGAGCAGATGACCTTCAAGGACTTGGTGTC
                                                              ATATGCCTCCAAGGGGAACTTGCGTGAATACTTGCGCACCGGCCGCCCACCTGGCATGGA
                                                                                                                                                                                                    AGACAAGCCCAAGGAGGCGGTCACCGTGGCCGTGAAGATGTTGAAAGATGATGCCACAGA 1847
                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTTCCTGATCACCTGCATGATTGGCACAATCATGGTGTGCCACATGAAGGGCAGAGGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGAAAAGGAGATTACAGCTTCCCCAGACTACCTGGAGATAGCCATTTACTGCATAGGGGT 1427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TAATTCTATTGGGATATCCTTTCACTCTGCATGGTTGACAGTTCTGCCAGCGCCTGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGTTCTCTATATTCGGAATGTAACTTTTGAGGACGCTGGGGAATATACGTGCTTGGCGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCCCACATCCAGTGGATCAAGCACGTGGAAAAGGAACGGCAGGTAAAATACGGGCCCGACGG
                                                                                                                                                                                                                                   GCCCCTGGGCGAAGGCTGCTTCGGGCAGGTGGTGATGGCAGAGGCGGTGGGCATCGACAA
                                                                                                                                                                                                                                                                              GTATGAGCTGCCAGAGGACCCCCAAGTGGGAGTATCCAAGGGAAAAGCTCACGCTGGGGAA
                                                                                                                                                                                                                                                                                                                       CCGGATCACCACTCGCCTGTCTTCCAACAATGACACCCACTTGCTGGCCGGGGTCTCCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGAACTGGA----TTCATCATCGGAGTATACGGAAATCGCCATCTACTGTGTGGGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TAATTCTACCGGGATCTCCTATCACACTGCATGGTTGACCGTTCTGCCAGATGAAGAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGTCCTCTATGTGCGCAATGTCTCTTTTGAGGATGCTGGGGAGTATACGTGCTTGGCGGG
                                                                                                                                                                                                                                                                                                                                                                1382
                                                              1802
                                                                                                                                                                                                                                   1562
                                                                                                                                                                                                                                                                                                                       1442
                                                                                                                                                                                                                                                                                                                                                                                    1607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1067
                     1862
                                                                                                                                                                                         1622
                                                                                                                                                                                                                                                                              1502
                                                                                                                                                                                                                                                                                                                                                                                                         1322
                                                                                                                                                                                                                                                                                                                                                                                                                            1547
                                                                                                                                                                                                                                                                                                                                                                                                                                                  1262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   968
```

80 밁 δÃ В δõ В Ş δ

```
RESULT 13
AAX85614
ID 8AX85
XX AAX85
AC AAX85
DT 06-SE
XX ACidi
KW ACidi
KW ACIG
XX ACIG
XX ACIG
EN TG33-
XX NOTOF
XX US592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Q. B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1863
                                                                                                                                                                                                                                                                                                                                           Acidic fibroblast growth factor; aFGF; wound healing; tissue repair; non-acidic fibroblast growth factor; mitogenic response; Tr31-5-1; Tr33-1-2; truncated form; newt; receptor; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                      Bek-like
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAX85614 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2268
                                                                                                        28-MAY-1993;
30-JUN-1997;
                                                                                                                                                                       30-JUL-1997;
                                                                                                                                                                                                              20-JUL-1999
                                                                                                                                                                                                                                                                                                    Notophthalmus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            06-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2508
                                                             VIND ( SIHO)
                      IM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGAACCATGCCTTCCTCAGTATCCACACATAAACGGCAGTGTTAAAAACATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAATGAGGAATACTTGGACCTCAGCCAACCTCTCGAACAGTATTCACCTAGTTACCCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCAAAGACCCACTTTCAAGCAGCTTGTTGAGGATCTAGACCGAATCCTCACGCAAACGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCAGAGACCAACGTTCAAGCAGTTGGTAGAAGACTTGGATCGAATTCTCACTCTCACAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGGCAACTGCACCAATGAGCTGTATACAATGATGACGACTGCTGCTGCGTGCTGTGCCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGTCTGGTCCTTCGGGGTGTTAATGTGGGAGATCTTCACTTTAGGGGGGCTCGCCCTACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGGACTCGCCAGAGATATCAACAATATAGACTATTACAAAAAGACCACCAATGGGCGGCT 2267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GACTTGGCAGCTCGGAATGTCTTGGTGACGGAAACCAACGTCATGAAAATTGCAGATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGACCCCTGTCTTCCCCAAATCCCCAACACACAAACGGCACCATTAAAACATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGCCAACTGCACCAACGAACTGTACATGATGATGAGGGACTGTTTGGCATGCAGTGCCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CGTCTGGTCTTTCGGTGTGCTTATGTGGGAGATCTTCACACTGGGGGGGTTCCCCATACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGATTTAGCAGCCAGAAATGTTTTGGTAACAGAAAACAATGTGATGAAAAATAGCAGACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                      newt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                               OIHO
                                                                                                                                                                                                                                                                                                    viridescens
                                                                                                                                                                                                                                                                                                                                                                                                                                 FGFR2 cDNA
                                                                                                   93US-0070165.
97US-0885418.
                                                                                                                                                                       97US-0885418
                                                             STATE RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2675
                                                             FOUND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1922
```

```
밁
                                                                                                                                                                                                                                                                       Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The specification describes a method for differentiating biological catchvitles among the full length form of acidic fibroblast growth for factor (aFGF) proteins and other non-acidic fibroblast growth factor (non-aFGF) proteins. FGF proteins are thought to be involved in wound the haling and tissue repair. The method comprises determining and comparing the mitogenic responses of Tr31-5-1 (AFCC CRL-12521) and Tr33-1-2 (AFCC CRL12522) cell lines to different forms of aFGF and non-aFGF proteins. The method may be used for differentiating biological contivities among the full length form and truncated forms of aFGF croteins and other (non-aFGF) proteins. The information thus obtained may be used to better understand the molecular basis of the multiple functions of FGF activity in physiological and pathological conditions. This understanding provides the basis for the rational design of both call grand and FGF receptor agonists and antagonists. The present sequence encodes bek-like newt fibroblast growth factor receptor FGFR2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                             1248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Distinguishing between the biological accir.
                                                                                                                                                                                                                                                                                                                                                                                                                 1008
                                                                                                                                                                                                                                                                              849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              648
                                                                                                                                                                                                                                                                                                                                                                         789
                                                                                                                                                                                                                                                                                                                                                                                                                                                               729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              432
                                                                                                                                                                                                                                                                                                                                                                 CCTGGATGTTGTGGAGCGATCGCCTCACCGGCCATCCTCCAAGCCGGACTGCCGGCAAA 1067
                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGTTCTCTATATTCGGAATGTAACTTTTGAGGACGCTGGGGAATATACGTGCTTGGCGGG
                                                                                                                                                                                                           GCCCCACATCCAGTGGATCAAGCACGTGGAAAAGAACGGCAGTAAATACGGGCCCGACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGGCTTCAAGGTAGGTAGTCAACACTTCAGCCTGATCATGGAGAGCGTGGTTCCCTCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGGCTACAAGGTACGAAACCAGCACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCTGA 947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCTCCATGCTGTGCGGCCAACACTGTCAAGTTTCGCTGCCCAGCCGGGGGGAACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGATGCCATCTCATCCGGGAGTGATGAGGATGACACCGATGGTGCGGAAGATTTTGTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1654;
                                                                                                              GCTGCCCTACCTCAAGGTTCTCAAGGCCGCCGGTGTTAACACCACGGACAAAGAGATTGA
                                                                                                                                                                                                                                                                              TGCCTCCACAGTGGTCGGAGGAGACGTAGAGGTTTGTCTGCAAGGGTTTACAGTGATGCCCA 1127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AATGCCAACCATGCGGTGGCTGAAAAACGGGAAGGAGTTTTAAGCAGGAGCATCGCATTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGAGAACAGTAACAACAAGAGAGCACCATACTGGACCAACACAGAAAAGATGGAAAAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGATGCAAACTCATCAGGGGATGATGAAGACGACGACGACGGCTCGGAAGATTTCACAAA 491
AGTCCTCTATGTGCGCAATGTCTCTTTTGAGGATGCTGGGGAGTATACGTGCTTGGCGG
                                                                                        GCATCCCTATCTGAAAGTGCTAAAGGCGGCCGGTGTTAACACCACGGACAAAGAGATCGA
                                                                                                                                                                                   GCCACATATCCAATGGATTCGACATTTTGAGCTGAATGGCAGTAAAATTGGACCTGACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACTCCATGCTGTGCCCGCTGCCAACACTGTGAAGTTCCGCTGTCCAGCCGGTGGCAACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGACAAC --- AACCACATGAGGGCTCCGTACTGGACGAATACAGAAAAATTGGAAAAGAA 548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Columns
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ВP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    between the biological activities
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 684 A; 716 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27-32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            32.0%;
79.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              44pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 1367.6;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             705 G; 570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       429;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 T; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20; Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    of.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    acidic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         comparing
                                                                                        1028
                                                                                                                                                                                   968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2
```

Ş

밁

Ş

Ş

Ş

밁 δÃ ş 8 ρy

밁 Q В Ş

Qy Дb S

```
Q
                                                                                                                                                                                                                                                              9
                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      д
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
멍
                          Ş
                                                       밁
                                                                               δ
                                                                                                                 밁
                                                                                                                                                                           밁
                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                     В
                             2328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAGGATAACAACACGCCTCTCTTCAACGGCAGACACCCCCATGCTGGCAGGGGTCTCCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAAGCCAGACTTCAGCAGCCAGCCGGCTGTGCACAAGCTGACCAAACGTATCCCCCTGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGTCTGGTCCTTCGGGGTGTTAATGTGGGAGATCTTCACTTTAGGGGGCTCGCCCTACCC
                                                     AGATTTAGCAGCCAGAAATGTTTTGGTAACAGAAAACAATGTGATGAAAATAGCAGACTT
                                                                                                                                                                                                                                                   ATGCACCTACCAGCTGGCCAGAGGCATGGAGTACTTGGCTTCCCAAAAATGTATTCATCG
                                                                                                                                                                                                                                                                                                           GTACTCCTATGACATTAACCGTGTTCCTGAGGAGCAGATGACCTTCAAGGACTTGGTGTC
                                                                                                                                                                                                                                                                                                                                                                       GTATGCCTCTAAAGGCAACCTCCGAGAATACCTCCGAGCCCGGAGGCCACCCGGGATGGA
                                                                                                                                                                                                                                                                                                                                                                                                                              GAATATCATAAATCTTCTTGGAGCCTGCACACAGGATGGGCCTCTCTATGTCATAGTTGA 1967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCCCCTGGGAGAAGGTTGCTTTGGGCAAGTGGTCATGGCGGAAGCAGTGGGAATTGACAA 1787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTATGAGCTGCCAGAGGACCCCCAAGTGGGAGTATCCAAGGGAAAAGCTCACGCTGGGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTATGAACTTCCAGAGGACCCAAAATGGGAGTTTCCAAGAGATAAGCTGACACTGGGCAA 1727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAGACAGGTAACAGTGTCTGCTGACTCCAGCTCTTCTATGAACTCCAACACTCCACTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGACAGGTAACAGTTTCGGCTGAGTCCAGCTCCTCCATGAACTCCAACACCCCCGCTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAAGTCTGACTTCAGCAGCCCACCCGCTGTGCACAAGCTGAGCAAGAGTCTCCCCCTGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGAACTGGA-----TTCATCATCGGAGTATACGGAAATCGCCATCTACTGTGTGGGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGAAAAGGAGATTACAGCTTCCCCAGACTACCTGGAGATAGCCATTTACTGCATAGGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TAATTCTACCGGGATCTCCTATCACACTGCATGGATGAACGTTCTGCCAGATGAAGAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TAATTCTATTGGGATATCCTTTCACTCTGCATGGTTGACAGTTCTGCCAGCGCCTGGAAG
CGTCTGGTCTTTCGGTGTGCTTATGTGGGAGATCTTCACACTGGGGGGGTTCCCCCATACCC
                                                                                                                                                                                                                                     ATATGCCTCCAAGGGGAACTTGCGTGAATACTTGCGCACCCGCCGCCCACCTGGCATGGA
                                                                                                                                                                                                                                                                                                                                                                                                                AMATATCATCAATCTTCTAGGAGCGTGCACCCAAGATGGCCCCACTCTACGTGATAGTCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCGGATCACCACTCGCCTGTCTTCCAACAATGACACCCACTTGCTGGCCGGGGTCTCCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1487
```

w ••

```
RESULT 14
RAQ14848
ID AAQ14
XX AQ14
XX AQ14
XX AQ14
XX AQ14
XX AQ14
XX Human
XX Human
XX Homo
XX Homo
XX Homo
XX AQ14
XX AQ16
XX ACDN
XX ACDN
CC Seque
CC Seque
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                       28-DEC-1990;
27-APR-1990;
31-JUL-1990;
14-SEP-1990;
was screened with an oligonucleotide corresponding to amino 529-541 of chicken basic FGF receptor. Three positive clone obtained. One was cloned into pUC118/119 to give pTB1228. T sequence of pTB1228 is shorter than that of pTB1229 lacking nucleotides 134-478 and 1309-1314 (see AAQ14849).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2163
                                                                                                                                                                                                                                                                                                                                                                     Clone pTB1228
                                                                                                                                                                                                                                                                                                                                                                                                         AAQ14848;
                                                                                                                                                                                                                                                                                                                                                                                                                            AAQ14848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2388
                                                                                   neoplasia,
                                                                                                                                                                                                                                                                           WO9117183-A
                                                                                                                                                                                                                                                                                                                                                                                        18-FEB-1992
                                                                                                                                                                     (TAKE
                                                                                                                                                                                                                                      25-APR-1991;
                                                                                                                                                                                                                                                        14-NOV-1991
                                                                                                                                                   Igarashi
                                    cDNA library prepared from human cancer cell line Kato III mRNA as screened with an oligonucleotide corresponding to amino acids
                                                                                 mutein(s) of proteins - with fibroblast growth factor eptor activity, useful for treating multiple endocrine plasia, prostatic hypertrophy, used for diagnosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAATGAGGAATACTTGGACCTCAGCCAACCTCTCGAACAGTATTCACCTAGTTACCCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1991-353723/48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CGAACCATGCCTTCCTCAGTATCCACACATAAACGGCAGTGTTAAAAACATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CACAAGAAGTTCTTGTTCTTCAGGAGATGATTCTGTTTTTTCTCCAGACCCCATGCCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCAAAGACCCACTTTCAAGCAGCTTGTTGAGGATCTAGACCGAATCCTCACGCAAACGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGACCCCTGTCTTCCCAAATCCCAACACACAAACGGCACCATTAAAACATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TACCAGGAGTTCCTGCTCTTCTGGGGATGACTCTGTCTTCTCCCCGGACGCAATGCCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCAGAGACCAACGTTCAAGCAGTTGGTAGAAGACTTGGATCGAATTCTCACTCTCACAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ) TAKEDA CHEMICAL IND
                                                                                                                                                                                                                                                                                                                                                    fibroblast
                                                                                                                        AAR15266
                                                                                                                                                   ~
                                                                                                                                                                                                                                                                                                                                                                                                                            standard;
                                                                 Fig
                                                                                                                                                                                                                                                                                                                                                                                       (first
                                                                                                                                                   Senoo
                                                                                                                                                                                                                                                                                                                                                                    encoding protein with FGF receptor activity
                                                                                                                                                                                       90JP-0415801.
90JP-0113146.
90JP-0204438.
90JP-0245256.
                                                                                                                                                                                                                                      91WO-JP00557
                                                                                                                                                                                                                                                                                           Location/Qualifiers
25..1602
/*tag= a
                                                                88pp;
                                                                                                                                                                                                                                                                                                                                                  growth
                                                                                                                                                   ž
                                                                                                                                                                                                                                                                                                                                                                                       entry)
                                                                                                                                                   Watanabe
                                                                                                                                                                                                                                                                                                                                                                                                                            1603
                                                                 English.
                                                                                                                                                                                                                                                                                                                                                   factor;
                                                                                                                                                                     Š
                                                                                                                                                   7
                                                                                                                                                                                                                                                                                                                                                   cancer;
                             clones
                     The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2739
                             were
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2222
                                           Qy
                                                               밁
                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
        S
                                                                                δõ
                                                                                                   g
                                                                                                                   Ş
                                                                                                                                        밁
                                                                                                                                                         Ş
                                                                                                                                                                            밁
                                                                                                                                                                                             Ş
                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                      δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sox
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 1404; Conserv
                                                                                                                     1499
                                                                                                                                                          1439
                                                                                                                                                                                                                                                                                                            1208
                                                                                                                                                                                                                                                                                                                                                                                     1088
         1679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1603
                            1022
                                                                                                                                                                                                                                                                        1268
                                                                                                                                                                                                                                                                                                                                                                                                                          1028
                                                                                                   806
                                                                                                                                        848
                                                                                                                                                                             788
                                                                                                                                                                                                                 728
                                                                                                                                                                                                                                                                                         614
                                                                                                                                                                                                                                                                                                                               554
                                                                                                                                                                                                                                                                                                                                                                   494
                                                                                                                                                                                                                                                                                                                                                                                                       434
                                                                                                                                                                                                                                                                                                                                                                                                                                           374
                                                                                                                                                                                                                                                                                                                                                                                                                                                              968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP;
```

```
CAGAGGACCCAAAATGGGAGTTTCCAAGAGATAAGCTGACACTGGGCAAGCCCCTGGGAG
                                                                                                                       CCTGTATGGTGGTAACAGTCATCCTGTGCCGAATGAAGAACACGACCAAGAAGAAGCCAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAGCACCATACTGGACCAACACAGAAAAGATGGAAAAGGGGCTCCATGCTGTGCCTGCGG
                                                                       CACGCCTCTCTTCAACGGCAGACACCCCCATGCTGGCAGGGGTCTCCGGAGTATGAACTTC
                                                                                                                                                                                             TCAGCAGCCAGCCGGCTGTGCACAAGCTGACCAAACGTATCCCCCTGCGGAGACAG----
                                                                                                                                                                                                                                                                                                                                                        TTACAGCTTCCCCAGACTACCTGGAGATAGCCATTTACTGCATAGGGGTCTTCTTAATCG
                                                                                                                                                                                                                                                                                                                                                                                                                                 TTCACTCTGCATGGTTGACAGTTCTGCC····---AGCGCCTGGAAGAGAAAAGGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCAAGGCCGCCGGTGTTAACACCCACGGACAAAGAGATTGAGGTTCTCTATATTCGGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGCCTCACCGGCCCATCCTCCAAGCCGGACTGCCGGCAAATGCCTCCACAGTGGTCGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGGTGGAGAATGAATACGGGTCCATCAATCACACGTACCACCTGGATGTTGTGGAGCGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCAACACTGTCAAGTTTCGCCTGCCCAGCCGGGGGGAACCCAATGCCAACCATGCGGTGGC
                                                       CACGCCTCTCTTCAACGGCAGACACCCCCCATGCTGGCAGGGGGTCTCCGAGTATGAACTTC
                                                                                                                                                                                                                                TCAGCAGCCAGCCGGCTGTGCACAAGCTGACCAAACGTATCCCCCTGCGGAGACAGGTAA
                                                                                                                                                                                                                                                                                                                                       TTACAGCTTCCCCAGACTACCTGGAGATAGCCATTTACTGCATAGGGGTCTTCTTAATCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGACCGAGGCGGATGCTGGGGAATATATATGTAAGGTCTCCAATTATATAGGGCAGGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TAACTTTTGAGGACGCTGGGGAATATACGTGCTTGGCGGGTAATTCTATTGGGATATCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCAAGCACTCGGGGATAAATAGTTCCAATGCAGAAGTGCTGGCTCTGT----TCAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGCACGTGGAAAAGAACGGCAGTAAATACGGGCCCGACGGGCTGCCCTACCTCAAGGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAGACGTAGAGTTTGTCTGCAAGGTTTACAGTGATGCCCAGCCCCACATCCAGTGGATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAGACGTAGAGTTTGTCTGCAAGGTTTACAGTGATGCCCAGCCCCACATCCAGTGGATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGGTGGAGAATGAATACGGGTCCATCAATCACACGTACCACCTGGATGTTGTGGAGCGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGCACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCTGACAAGGGAAATTATACCTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGAAAAACGGGAAGGAGTTTAAGCAGGAGCATCGCATTGGAGGCTACAAGGTACGAAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGAAAAACGGGAAGGAGTTTAAGCAGGAGCATCGCATTGGAGGCTACAAGGTACGAAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCAACACTGTCAAGTTTCGCTGCCCAGCCGGGGGGAACCCAATGCCAACCATGCGGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                             ACCAGTCTGCCTGGCTCACTGTCCTGCCAAAACAGCAAGCGCCTGGAAGAGAAAAGGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGCACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCTGACAAGGGAAATTATACCTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGCACGTGGAAAAGAACGGCAGTAAATACGGGCCCGACGGGCTGCCCTACCTCAAGGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      434 A; 403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30.98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0,:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1318.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      <u>G</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  57;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      other
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1603;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                           1021
                                                                                                                                                                                                                                                                                                                                                                                                                                              1378
                                                       1081
                                                                                      1678
                                                                                                                                                            1618
                                                                                                                                                                                                                                                                                                    1498
                                                                                                                                                                                                                                                                                                                                                                        1438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1027
                      1738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            193
                                                                                                                                                                                               963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               787
                                                                                                                                                                                                                                                                   907
                                                                                                                                                                                                                                                                                                                                       847
                                                                                                                                                                                                                                                                                                                                                                                                           787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      253
```

```
á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Š
        엉
                                                                                                                                                                                                                                                                                                                                                                                                                      ő
                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                       1562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1082
                                                                                                                                                                                                                                                                                                                                                                                                                                               1502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1799
                                                                                                                           misc_signal
                                                                                                                                                                                    misc_signal
                                                                                                                                                                                                                                      Notophthalmus viridescens.
                                                                                                                                                                                                                                                                 Newt; keratinocyte growth factor receptor: KGFR; wound fibroblast growth factor receptor-3; FGFR-3; cell line;
                                                                                                                                                                                                                                                                                               Keratinocyte
                                                                                                                                                                                                                                                                                                                 28-JUL-1998
                                                                                                                                                                                                                                                                                                                                                      AAV19078 standard;
(OHIS ) UNIV OHIO STATE RES FOUND
                                              28-MAY-1993;
                                                                                     US5750365-A
                                                                                                                                                                                                                                                        recombinant protein; fibroblast growth factor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCAGAAATGTTTTGGTAACAGAAAACAATGTGATGAAAATAG
                                                                                                                                                                                                                                                                                                                                                                                                                                             AGCTGGCCAGAGGCATGGAGTACTTGGCTTCCCAAAAATGTATTCATCGAGATTTAGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAGGCAACCTCCGAGAATACCTCCGAGGCCCGGAGGCCACCCGGGATGGAGTACTCCTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATCTTCTTGGAGCCTGCACACAGGATGGGCCTCTCTATGTCATAGTTGAGTATGCCTCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGATCTGGTGTCAGAGATGGAGGATGATGAAGATGATTGGGAAACACAAGAATATCATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGATCTGGTGTCAGAGATGGAGATGATGAAGATGATTGGGAAACACAAGAATATCATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGGAGGCGGTCACCGTGGCCGTGAAGATGTTGAAAGATGATGCCACAGAGAAAGACCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGGAGGCGGTCACCGTGGCCCGTGAAGATGTTGAAAGATGATGCCACAGAGAAAAGACCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGAGGACCCAAAATGGGAGTTTCCCAAGAGATAAGCTGACACTGGGGCAAGCCCCTGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAGGCAACCTCCGAGAATACCTCCGAGCCCGGAGGCCACCCGGGATGGAGTACTCCTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATCTTCTTGGAGCCTGCACACAGGATGGGCCTCTCTATGTCATAGTTGAGTATGCCTCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACATTAACCGTGTTCCTGAGGAGCAGATGACCTTCAAGGACTTGGTGTCATGCACCTACC
                                                                                                                                                                                                                                                                                              growth factor receptor isoform nucleotide sequence
                                                                                                                                                                                                                                                                                                                 (first
                          93US-0070165
                                             93US-0070165
                                                                                                                           /*tag= c
/product=
324..384
                                                                                                                                                                                     /*tag= 8
267..323
                                                                                                                                                        /*tag= b
/note= "unspecified signal"
267..2520
                                                                                                        /note-
                                                                                                                  /*tag=
                                                                                                                                               /*tag=
                                                                                                                                                                                                                 ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                        CDNA;
                                                                                                                                                                                                                                                                                                                entry)
                                                                                                        "hydrophobic signal"
                                                                                                                                                                                                D
                                                                                                                                      KGFR
                                                                                                                                                                                                                                                                                                                                                         ВР
                                                                                                                                      isoform"
                                                                                                                                                                                                                                                                                                                                                                                                        1603
                                                                                                                                                                                                                                                                                                                                                                                                                           2200
                                                                                                                                                                                                                                                                   line;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1858
                                                                                                                                                                                                                                                                                                                                                                                                                                                 1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1261
```

```
В
                                                                                                             δõ
                                                                                                                                            ₽
                                                                                                                                                                     Ş
                                                                                                                                                                                                   ₽
                                                                                                                                                                                                                           ş
                                                                                                                                                                                                                                                            Вb
                                                                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                          망
                                                                                                                                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qy
Ş
                            Вþ
                                                    Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity Matches 1607; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This cDNA clone comprises the nucleotide sequence encoding the keratinocyte growth factor receptor (KGFR) isoform isolated from the regenerating foralimb blastema of an adult Notophthalmus viridscens (newt). It is fibroblast growth factor (FGF) related with properties of a paracine effector of epithelial cell growth. The cDNA clone is used for producing recombinant newt aFGF, which can be used to promote growth of cultured cell lines, e.g. cell lines used to produce other recombinant proteins, or to promote wound
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A cDNA clone, useful for producing recombinant protein - con DNA sequence coding Notophthalmus viridscens (newt) acidic fibroblast growth factor (aFGF)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chiu IM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1998-296766/26
 1308
                                                                                                                                                                          1128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; Fig 2A-2B; 44pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  492
                                                                                                                                                                                                                                                                                                                     729
                                                                                                                                                                                                                                                                                                                                                                                                                                   609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           708
                                                                                                                                                                                                     849
                                                                                                                                                                                                                                                             789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGGCTACAAGGTACGAAACCAGCACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGATGCCATCTCATCCGGAGATGATGAGGATGACACCGATGGTGCGGAAGATTTTGTCAG
                                                                                                                                                                                                                                                                         CCTGGATGTTGTGGAGCGATCGCCTCACCGGCCCATCCTCCAAGCCGGACTGCCGGCAAA 1067
                                                                                                                                                                                                                                                                                                                   CGGCTTCAAGGTACGTAGTCAACACTTCAGCCTGATCATGGAGAGCGTGGTTCCCTCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                 AATGCCAACCATGCGGTGGCTGAAAAACGGGGAAGGTTTAAGCAGGAGCATCGCATTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCTCCATGCTGTGCCTGCGGCCAACACTGTCAAGTTTTCGCTGCCCAGCCGGGGGGAACCC
                                            GGTTCTCTATATTCGGAATGTAACTTTTGAGGACGCTGGGGAATATACGTGCTTGGCGGG 1307
                                                                                                     GCTGCCCTACCTCAAGGTTCTCAAGGCCGCCGGTGTTAACACCCACGGACAAAGAGATTGA 1247
                                                                                                                                                            GCCCACATCCAGTGGATCAAGCACGTGGAAAAGAACGACGGCAGTAAATACGGGCCCGACGG 1187
                                                                                                                                                                                                     TGCCTCCACAGTGGTCGGAGGAGAGGTAGAGCTTTGTCTGCAAGGTTTACAGTGATGCCCA 1127
                                                                                                                                                                                                                                                                                                                                              TACGCCCTCCATGAGGTGGCTGAAGAACGGCAAGGAGTTCAAGCAGGAGCACCGCATTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACTCCATGCTGTGCCCGCTGCCAACACTGTGAAGTTCCGCTGTCCAGCCGGTGGCAACCC
TAATTCTATTGGGATATCCTTTCACTCTGCATGGTTGACAGTTCTGCCAGCGCCTGGAAG
                                                                                                                                             GCCACATATCCAATGGATTCGACATTTTGAGCTGAATGGCAGTAAAATTGGACCTGACGG
                                                                                                                                                                                                                                                            CCTGGATGTTGTCGAGCGGTCACCCCACCGGCCAATACTCCAAGCTGGGCTTCCGGCAAA
                          AGTTCTGACCCTGCATAACGTGACTGAGGCGGACCGGGGCCAGTACACATGCAAAGTCTC
                                                                                     GCATCCCTATCTGAAAGTGCTAAAGCGCTCTGGAATTAATAGCTC-----CAATGCCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2681 BP; 692 A; 722 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Poulin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ž
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29.98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 1276.4; DB 17
Pred. No. 2.9e-305;
Pred. No. 2.9e-305;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         င္ပ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        563 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 19; Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      isolated from the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      comprises
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                               848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     707
    1367
                                                                                                                                               968
                                                                                                                                                                                                        908
                                                                                                                                                                                                                                                                                                                                                                                                       947
                                                                                                                                                                                                                                                                                                                                                                                                                                     668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     827
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             767
```

u ٠٠

2441	CTACCCAGGGATTCCCCGTGGAGGAACTTTTTTAAGCTGCTGAAGGAAG	2382
2381 2162	GAGTGATGTCTGGTCCTTCGGGGTGTTAATGTGGGAGATCTTCACTTTAGGGGGCTCGCC	2322 2103
2321 2102	GCGGCTTCCAGTCAAGTGGATGGCTCCAGAAGCCCTGTTTGATAGAGTATACACTCATCA	2262 2043
2261 2042	AGACTTTGGACTCGCCAGAGATATCAACAATATAGACTATTACAAAAAGACCACCAATGG	2202 1983
2201 1982	TCATCGAGATTTAGCAGCCAGAAATGTTTTGGTAACAGAAAACAATGTGATGAAAATAGC 	2142 1923
2141 1922	GGTGTCATGCACCTACCAGCTGGCCAGAGGCATGGAGTACTTGGCTTCCCAAAAATGTAT	2082 1863
2081 1862	GATGGAGTACTCCTATGACATTAACCGTGTTCCTGAGGAGCAGATGACCTTCAAGGACTT	2022 1803
2021 1802	AGTTGAGTATGCCTCTAAAGGCAACCTCCGAGAATACCTCCGAGCCCGGAGGCCACCCGG	1962 1743
1961 1742	ACACAAGAATATCATAAATCTTCTTGGAGCCTGCACACAGAGATGGGCCTCTCTATGTCAT	1902 1683
1901 1682	CACAGAGAAAGACCTTTCTGATCTGGTGTCAGAGATGAGGAGATGATGAAGATGATTGGGAA	1842 1623
1841 1622	TGACAAAGACAAGCCCAAGGAGGCGGTCACCGTGGCCGTGAAGATGTTGAAAGATGATGC	1782 1563
1781 1562	GGGCAAGCCCCTGGGAGAAGGTTGCTTTGGGCAAGTGGTCATGGCGGAAGCAGTGGGAAT	1722 1503
1721 1502	CTCCGAGTATGAACTTCCAGAGGACCCAAAATGGGAGTTTCCAAGAGATAAGCTGACACT	1662 1443
1661 1442	GTGGTGAGGATAACAACACGCCTCTCTTCAACGGCAGACACCCCCATGCTGGCAGGGGT	1602 1383
1601 1382	CCTGCGGAGACAGGTAACAGTTTCGGCTGAGTCCAGCTCCTCCATGAACTCCAACACCCC	1542 1323
1541 1322	GACCAAGAAGCCAGACTTCAGCAGCCAGCCGGCTGTGCACAAGCTGACCAAACGTATCCC 	1482 1263
1481 1262	AGGGGTCTTCTTAATCGCCTGTATGGTGGTAACAGTCATCCTGTGCCCGAATGAAGAACAC	1422 1203
1421 1202	AGAAAAGGAGATTACAGCTTCCCCAGACTACCTGGAGATAGCCATTTACTGCAT	1368 1143
1142		1083

Ş 망 Ş 망 γQ дδ Qy 밁 οy DЪ Qγ DЬ Qγ В δÃ Вb Qy

```
Ş
                    밁
                             Š
                                        DЬ
                                                 γQ
                                                            망
                                                                     Q
                                                                                밁
                                                                                         δÃ
                                                                                                     В
밁
                                                                                2463 GCCCTACGACCCCTGTCTTCCCAAATCCCAACACACAAACGGCACCATTAAAACATGA 2520
    2682 GCCTTACGAACCATGCCTTCCTCAGTATCCACACATAAACGGCAGTGTTAAAACATGA 2739
```

Search completed: December 11, 2002, 14:31:24 Job time : 598 secs

THIS PAGE BLANK (USPTO)

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Minimum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OM nucleic -
         118
123
124
124
125
126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
    3386.6

3187.2

11817.2

11817.2

1182.3

11367.6

11318.8

11318.8

11276.4

11276.4

1182.2

1182.2

1182.3

1180.6

1159.2

1159.2

1159.2

1159.2

1141

1141

1141

1141

1141

1159.2

1169.2

1169.2

1169.2

1179.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1189.2

1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3386.6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      seq length: 0 seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      December 11, 2002, 12:57:41; Search time 99 Seconds (without alignments)
13221.176 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Match Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              441362 seqs, 153338381 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-954-556-3
4268
    IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Issued_Patents_NA:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GenCore version 5.1.3 Copyright (c) 1993 - 2002 Compugen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /cgn2_6/ptodata/1/ina/5A_COMB.seq:*
/cgn2_6/ptodata/1/ina/5B_COMB.seq:*
/cgn2_6/ptodata/1/ina/6A_COMB.seq:*
/cgn2_6/ptodata/1/ina/6B_COMB.seq:*
/cgn2_6/ptodata/1/ina/BCTUS_COMB.seq:*
/cgn2_6/ptodata/1/ina/backfiles1.seq:*
DB
                  US-08-451-822A-15
US-08-471-570-7
US-08-471-570-5
US-08-471-570-9
US-08-471-570-9
US-08-471-570-3
US-08-471-570-3
US-08-471-570-3
US-08-485-418-9
US-08-485-286-133-2
US-08-451-822A-14
US-08-451-822A-14
US-08-371-001-14
US-08-371-001-14
US-08-371-001-14
US-08-383-630-14
US-09-383-630-1
US-09-383-630-2
US-09-383-630-4
US-09-383-630-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ltd
                                                         Sequence
                Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Description
                                                                                                7, Appli
9, Appli
5, Appli
5, Appli
3, Appli
9, Appli
9, Appli
1, Appli
11, Appli
12, Appli
13, Appli
14, Appli
15, Appli
16, Appli
17, Appli
18, Appli
19, Appli
19, Appli
19, Appli
10, Appli
10, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-08-451-822A-15
```

45	44	4.	42	41	40	9	38	37	36	ω U	34	ω	32	ω L	30	29	28
192.8	192.8	192.8	192.8	192.8	192.8	194	197.4	205	205	245.4	426.2	542.2	597.6	598.8	603.4	623	623
5	4.5	4.5	4.5	4.5	4.5	4.5	4.6	4.8	4.8	5.7	10.0	12.7	14.0	14.0	14.1	14.6	14.6
5406	5406	5406	5406	5406	5406	3845	360	4138	4138	4508	1983	734	933	1056	605	1839	1839
س	-	_	_	<u>د د</u>		N	σ	S	_	G	4	_	N	N	-	N	<u></u>
US-08-601-891-5	US-07-906-397A-5	US-08-252-517-5	US-07-946-507-3	US-07-977-451-5	US-07-813-593-3	US-08-220-240A-4	PCT-US93-05703-1	PCT-US93-06093-1	US-08-323-474-1	PCT-US93-06251-34	US-09-057-860A-8	US-08-471-570-11	US-08-701-191A-4	US-08-701-191A-5	US-08-471-570-1	US-08-885-418-7	US-08-070-165F-7
Sequence 5, Appl	Sequence 5, Appl	Sequence 5, Appl	Sequence 3, Appl	ŗ,	ω	4	<u>-</u>	Sequence 1, Appl	Sequence 1, Appl	Sequence 34, App	8 A	Sequence 11, App	Sequence 4, Appl	Sequence 5, Appl	Sequence 1, Appl	Sequence 7, Appl	Sequence 7, Appl

ALIGNMENTS

Application US/08451822A

```
Sequence 15, Application US/08451822A
Patent No. 5863888
GENERAL INFORMATION:
APPLICANT: Dionne, Craig A
APPLICANT: Crumley, Greg
APPLICANT: Schlessinger, Joseph
TITLE OF INVENTION: Fibroblast Gro
NUMBER OF SEQUENCES: 19
                                                                                                                                                         APPLICATION NUMBER: US/08/451,822A
FILING DATE: 26-MAY-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/323,430
FILING DATE: 14-OCT-1994
PRIOR APPLICATION NUMBER: US 07/934,372
PRIOR APPLICATION NUMBER: US 07/934,372
FILING DATE: 21-AUG-1992
PRIOR APPLICATION NUMBER: US 07/934,372
FILING DATE: 01-AUG-1990
ATTORNEY/AGENT INFORMATION:
NAME: SAVITZKY, MARTÍN
REGESTRATION NUMBER: 29,699
REFERENCE/DOCKET NUMBER: 29,699
REFERENCE/DOCKET NUMBER: A0496E
TELECOMMUNICATION INFORMATION:
TELEPHONE: (610) 454-3816
                                                                                           TELEFAX: (610) 454-3801
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: Rhone-Poulence STREET: 500 Arcola Road
TOPOLOGY:
                                                               LENGTH:
TYPE: n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET: 500 Arcola
CITY: Collegeville
STATE: PA
                                       STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19426
                                                      nucleic acid
    TYPE:
                                                                                                                                              (610) 454-3808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           USA
                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rhone-Poulenc
                                         single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US/08/451,822A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rorer Legal Department
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Growth Factor Receptors
```

```
B 5
                                                                                                                                                                                                                                                         6 g 6
                                                                                                                                                                                                                                                                                                             Š
                                                                                                                                                                                                                                                                                                                           Вþ
                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                          멍
                                                                                                                                                                                                                                                                                                                                                                                                                        Š
  유
                        ρb
                                     64
65
65
                                                                              В
                                                                                           Ŷ
                                                                                                        д
2
                                                                                                                                    용 왕
                                                                                                                                                               B 5
                                                                                                                                                                                           밁
                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                       ф
                                                                                                                                                                                                                                                                                                                                                                                                                                                ₽.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-08-451-822A-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Ma
Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                            333
  960
                             900
                                                                                               873
                                                                                                                                                                                            540
                                                                                                                                                                                                                      480
                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                          360
                                                                                                                                                                                                                                                                                                    300
                                                                                                                                                                                                                                                                                                                 393
                                                                                                                                                                                                                                                                                                                                                                                                 213
                                                                                                                          813
                                                                                                                                       660
                                                                                                                                                   753
                                                                                                                                                                  600
                                                                                                                                                                               693
                                                                                                                                                                                                                                                             513
                                                                                                                                                                                                                                                                                      453
                                                                                                                                                                                                                                                                                                                                                                                                                           153
                                                                                 780
                                                                                                            720
                                                                                                                                                                                                                                                                                                                                                         081
                                                                                                                                                                                                                                                                                                                                                                                    20
                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                     93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
les 3411; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Match
                                                                                                                                                                                                                                                                                                                                                                                                                                       CGGACTGCCGGCAAATGCCTCCACAGTGGTCGGAGGAGACGTAGAGTTTGTCTGCAAGGT
                                                                                                                                                                                                                                                                                                   GCAGATGGGATTAACGTCCACATGGAGATATGGAAGAGGACCGGGGATTGGTACCGTAAC
                                                                                                                                                                                                                                                                                                                                                                                                             TTCCTGAGCCCACCGCAGGCTGAAGGCATTGCGCGTAGTCCATGCCCGTAGAGGAAGTGT
                                   CAATCACACGTACCACCTGGATGTTGTGGAGCGATCGCCTCACCGGCCCATCCTCCAAGC
                                                              AAAGATGGAAAAGCGGCTCCATGCTGTGCCTGTGCGGCCAACACTGTCAAGTTTCGCTGCCC
                                                                                                                                                                 CATGGTGAATGTCACAGATGCCATCTCATCCGGAGATGATGAGGATGACACCGATGGTGC
                                                                                                                                                                                                                             AGACTCCGGCCTCTATGCTTGTACTGCCAĞTAGGACTGTAGACAGTGAAACTTGGTACTT
                                                                                                                                                                                                                                               GCCCAACAATAGGACAGTGCTTATTGGGGAGTACTTGCAGATAAAGGGCGCCCACGCCTAG
                                                                                                                                                                                                                                                                         GGCCCGGCCCTCCTTCAGTTTAGTTGAGGATACCACATTAGAGCCAGAAGAGCCACCAAC
                                                                                                                                                                                                                                                                                                                                     GGCCCGGCCCTCCTTCAGTTTAGTTGAGGATACCACATTAGAGCCAGAAGAGCCACCAAC
                                                                                                                                                                                                                                                                                                                                                         CATGGTCAGCTGGGGTCGTTTCATCTGCCTGGTCGTCGTCACCATGGCAACCTTGTCCCT
                                                                                                                                                                                                                                                                                                                                                               CATGGTCAGCTGGGGTCGTTTCATCTGCCTGGTCGTCGTCGTCATGGCAACCTTGTCCCT
                             CAATCACACGTACCACCTGGATGTTGTGGAGCGATCGCCTCACCGGCCCATCCTCCAAGC
                                                                                                                                                                                                                       AGACTCCGGCCTCTATGCTTGTACTGCCAGTAGGACTGTAGACAGTGAAACTTGGTACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         . 88;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3386.6
No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                <u>ب</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  <u>ب</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                   632
                                                                                                                                                                                                                                                                                                                 452
                                                                                                                                                                                                                                                                                                                                                                                    179
                                          1052
                                                                                                                                                                   659
                                                                                                                                                                                                                                                 479
                                                                                                                                                                                                                                                             572
                                                                                                                                                                                                                                                                          419
                                                                                                                                                                                                                                                                                      512
                                                                                                                                                                                                                                                                                                                               299
                                                                                                                                                                                                                                                                                                                                            392
                                                                                                                                                                                                                                                                                                                                                                       332
                                                                                                                                                                                                                                                                                                                                                                                                  272
                                                                                                                                                                                                                                                                                                                                                                                                                           212
                                                                                                                                                                                                                                                                                                                                                                                                                                         60
                             959
                                                        668
                                                                     992
                                                                                 839
                                                                                               932
                                                                                                                          872
                                                                                                                                       719
                                                                                                                                                    812
                                                                                                                                                                               752
                                                                                                                                                                                            599
                                                                                                                                                                                                         692
                                                                                                                                                                                                                                                                                                    359
                                                                                                                                                                                                                                                                                                                                                         239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Dβ
                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                         δÔ
                                                                                                                                                                                                                                                                                                                                                                                                   οy
                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                  Š
                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                       õ
                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                               망
                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                         망
                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q<sub>y</sub>
                   Š
                                  Вb
                                             Ş
                                                             Вb
                                                                       Ş
                                                                                        В
                                                                                                   δÃ
                                                                                                                  ₽
                                                                                                                            Qy
                                                                                                                                             망
                                                                                                                                                         Ş
                                                                                                                                                                       멍
                                                                                                                                                                                                  Дb
                                                                                                                                                                                                                           뫄
         B
                                                                                                                                              1740
                                                                                                                                                                                                                                                       1500
                                                                                                                                                                                                                                                                                 1440
                                                                                                                                                                                                                                                                                                                                                  1413
                                                                                                                                                                                                                                                                                                                                                                                                                     1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1113
                                                                                                                   1800
                                                                                                                                                                        1680
                                                                                                                                                                                                                             1560
                                                                                                                                                                                                                                                                                                                                                                                          1200
                                                                                                                                                                                                                                                                                                                                                                                                                                               0801
                                                                                                                                                                                                                                                      TTACTGCATAGGGGTCTTCTTAATCGCCTGTATGGTGGTAACAGTCATCCTGTGCCGAAT
                                                                                                                                                                                                                                                                                                                                                               GCCAGCGCCTGGAAGAGAAAAGGAGATTACAGCTTCCCCAGACTACCTGGAGATAGCCAT
                                                                                                                                                                                                                                                                                                                                                                                         TTACAGTGATGCCCAGCCCCACATCCAGTGGATCAAGCACGTGGAAAAGAACGGCAGTAA
                                                                                       CTATGTCATAGTTGAGTATGCCTCTAAAGGCAACCTCCGAGAATACCTCCGAGCCCGGAG
                                                                                                                  ACGTATCCCCCTGCGGAGACAGGTAACAGTTTCGGCTGAGTCCAGCTCCTCCATGAACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATACGGGCCCGACGGGCTGCCCTACCTCAAGGTTCTCAAGGCCGCCGGTGTTAACACCAC
        AAAATGTATTCATCGAGATTTAGCAGCCAGAAATGTTTTGGTAACAGAAAACAATGTGAT
                                  GCCACCCGGGATGGAGTACTCCTATGACATTAACCGTGTTCCTGAGGAGCAGATGACCTT
                                                                                                                                             AGATGATGCCACAGAGAAAAGACCTTTCTGATCTGGTGTCAGAGATGGAGATGATGAAGAT
                                                                                                                                                                               AGTGGGAATTGACAAAGACAAGCCCAAGGAGGCGGTCACCGTGGCCGTGAAGATGTTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                               ATACGGGCCCGACGGGCTGCCCTACCTCAAGGTTCTCAAGGCCGCCGGTGTTAACACCAC
                                                                                                                                                                        AGTGGGAATTGACAAAGACAAGCCCAAGGAGGCGGTCACCGTGGCCGTGAAGATGTTGAA
```

1772 1619

1679

1892

1799

1952

1859

1979

2072

1919

2012

2132

2192 2039 1712

1559

1652

1592 1439 1532

1499

1319 1412 1352

1139 1232 1079 1172

δ

B 64 B 64

```
3273
                                                          3060
                                                                                               3000
                                                                                                                   3093
                                                                                                                                     2940
                                                                                                                                                        3033
                                                                                                                                                                           2880
                                                                                                                                                                                             2973
                                                                                                                                                                                                                2820
                                                                                                                                                                                                                                  2913
                                                                                                                                                                                                                                                                        2853
                                                                                                                                                                                                                                                                                           2700
                                                                                                                                                                                                                                                                                                                                2640
                                                                                                                                                                                                                                                                                                                                                   2733
                                                                                                                                                                                                                                                                                                                                                                      2580
                                                                                                                                                                                                                                                                                                                                                                                        2673
                                                                                                                                                                                                                                                                                                                                                                                                           2520
                                                                                                                                                                                                                                                                                                                                                                                                                              2613
                                                                                                                                                                                                                                                                                                                                                                                                                                                2460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2100
                                                                                                                                                                     TAACCCCTCTCACCTGCCGTGCGTTCTGGGCTGTGGACCAGTAGGACTCAAGGTGGACGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCATGCAGTGCCCTCCCAGAGACCAACGTTCAAGCAGTTGGTAGAAGACTTGGATCGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAAAATAGCAGACTTTGGACTCGCCAGAGATATCAACAATATAGACTATTACAAAAÁGAC
CACATAATTTCTTAATTTTCACCGAGCAGAGGTGGAAAAATACTTTTGCTTTCAGGGAAA
                           AATGCACCTAGAAAATTGGTCTCTCTTTTTTAATAGCTATTTGCTAAATGCTGTTCTTA
                                                       AAATATATATATATATTTACAAGGAGTTATTTTTTGTATTGATTTTAAATGGATGTCCC
                                                                AAATATATATATATATATACAAGGAGITATTTTTGTATTGATTTTAAATGGATGTCCC
                                                                                                      TAATCTTCCCCAGGAGAAGAAGGATTTCTGGAGCAGTGGACTGCCACAAGCCACCATG
                                                                                                                                                                                                                                                              GAGTAAATAATTGGAAAAGTAATCAGCATATGTGTAAAGATTTATACAGTTGAAAACTTG
                                                                                                                                                                                                                                                                                                                                                                   CAGAATGGATAAGCCAGCCAACTGCACCAACGAACTGTACATGATGATGATGAGGGACTGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CACTCATCAGAGTGATGTCTGGTCCTTCGGGGTGTTAATGTGGGAGATCTTCACTTTAGG
                                                                                           TAATCTTCCCCAGGAGGAGAAGGAAGGTTTCTGGAGCAGTGGACTGCCACAAGCCACCATG
                                                                                                                                                                                                                                                    GAGTAAATAATTGGAAAAGTAATCAGCATATGTGTAAAGATTTATACAGTTGAAAACTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGAATGGATAAGCCAGCCAACTGCACCAACGAACTGTACATGATGATGAGGGACTGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CACTCATCAGAGTGATGTCTGGTCCTTCGGGGTGTTAATGTGGGAGATCTTCACTTTAGG
                                                        3119
                                                                          3212
                                                                                             3059
                                                                                                                3152
                                                                                                                                                                                          3032
                                                                                                                                                                                                                                                                                                                              2699
                                                                                                                                                                                                                                                                                                                                                                     2639
                                                                                                                                                                                                                                                                                                                                                                                     2732
                                                                                                                                                                                                                                                                                                                                                                                                                            2672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2219
                                                                                                                                   2999
                                                                                                                                                      3092
                                                                                                                                                                         2939
                                                                                                                                                                                                             2879
                                                                                                                                                                                                                                 2972
                                                                                                                                                                                                                                                    2819
                                                                                                                                                                                                                                                                      2912
                                                                                                                                                                                                                                                                                         2759
                                                                                                                                                                                                                                                                                                            2852
                                                                                                                                                                                                                                                                                                                                                 2792
                                                                                                                                                                                                                                                                                                                                                                                                          2579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2252
```

6 6 6 δÃ 뫄 δÃ 밁 Qy 밁 ð В ρ 밁 Ŷ B γo B δÃ 밁 ρ Ġ. δō В δõ 밁 Q 밁 QY B

0y 0b

γ

TTCCTGAGCCCACCGCAGGCTGAAGGCATTGCGCGTAGTCCATGCCCCGTAGAGGAAGTGT

```
QΥ
                                                                                                                                 ; LENGTH: 3416 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
US-08-323-430-15
   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 2
US-08-323-430-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                            PRIOR APPLICATION DATA:

APPLICATION NUMBER: US to be a
FILING DATE: 21-AUG-1992

APPLICATION NUMBER: US 07/549

APPLICATION NUMBER: US 07/549

APTORNEY/AGENT INFORMATION:

NAME: GOODMAN, ROSANNE

REGISTRATION NUMBER: 32,534

REFERENCE/DOCKET NUMBER: A0494

TELECOMMUNICATION INFORMATION:
TELEPHONE: (215) 454-3817

TELEPHONE: (215) 454-3808

INFORMATION FOR SEQ ID NO: 15:
SEQUENCE CHARACTERISTICS:
LENGTH: 3415 BASO 3415
                                                                    Query Match
Best Local S
Matches 3411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 15, Application Patent No. 6344546 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE: Rhone-Poulenc Rorer Legal Depart
STREET: 500 Arcola Road
CITY: Collegeville
STATE: PA
COUNTRY: USA
ZIP: 19426
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATION SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/323,430
FILING DATE:
CLASSIFICATION 1047A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Dionne, Craig A
APPLICANT: Crumley, Greg
APPLICANT: Jaye, Michael C
APPLICANT: Schlessinger, Joseph
TITLE OF INVENTION: Fibroblast Gr
NUMBER OF SEQUENCES: 15
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3360
                                   93
                                                                    Local Similarity
les 3411; Conserv
     N
TGCTTGGACTTAACTAGTTATCAGATCCTTTGAAAAGAGAATATTTACAATATATGA 3509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTTTTTTGTAATTTAAGTGGCATTTCTATGCAGGCAGCACCAGCAGCTAGTTAATCTAT 3452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATGGTATAACGTTAATTTAATTAATAAATTGGTAATATACAAAACAATTAATCATTTATAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTTTTTTTTTAAGTGGCATTTCTATGCAGGCAGCAGCAGCAGACTAGTTAATCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATGGTATAACGTTAATTAATAATAAATTGGTAATATACAAAACAATTAATCATTTATAG 3299
                                                                    Conservative
                                                                                 79.3%;
99.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US/08323430
                                                                                                                                                                                                                                                                                                                                                                                                07/549,587
                                                                                                                                                                                                                                                                                                                                                                                                                                to be assigned
                                                                                                                                                                                                                                                                                                                   A0496
                                                                Score 3386.6;
Pred. No. 0;
0; Mismatches
                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Rorer Legal Department
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Growth
                                                                           (0,6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Factor Receptors
                                                                                                   DΒ
                                                                  <u>..</u>
                                                                                             ٠.
                                                                  Indels
                                                                                               Length
                                                                                                    3416;
                                                                2
                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3239
                                                                2
```

В

B 6 B

TTACAGTGATGCCCAGCCCCACATCCAGTGGATCAAGCACGTGGAAAAGAACGGCAGTAA 107 ATACAGTGATGCCCGAGCCCCCACATCCAGTGGATCAAGCACGTGGAAAAAGAACGGCAGTAA 107 ATACAGGGCCCGACGGGCTGCCCTACCTCAAGGTTCTCAAGGCCGCCGGTGTTAACACCCAC 123	III III	73 GGAGCATCGCATTGGAGGCTACAAGGTACGAAACCAGCACTGGAGCCTCATTATGGAAAG 932		93 GGAAGATTTTGTCAGTGAGAACAGTAACAACAAGAGAGGAGCACCATACTGGACCAACACAGA 75 	5/3 AGACTCCGGCCTCTATGCTTACTGCCAGTAGGACTTAGACAGTGAAACTTGGTACTT 632	3 GCCCAACAATAGGACAGTGCTTATTGGGGAGTACTTGCAGATAAAGGGCGCCACGCCTAG 5	00 CAAATACCAAATCTCTCAACCAGAAGTGTACGTGGCTGCACCAGGGGAGTCGCCTAGAGGT 3 GCGCTGCCTGTTGAAAGATGCCGCCGTGATCAGTTGGCTTGGACTAGGGGGAGTCGCCTTGGG 5 GCGCTGCCTGTTGAAAGATGCCGCCGTGATCAGTTGGACTAAGGATGGGGTCACTTGGG 5 GCGCTGCCTGTTGAAAGATGCCGCCGTGATCAGTTGGACTAAGGATGGGGTGCACTTGGG 6 GCGCTGCCTTGGACTAAGGATGGCGCACTTAAGGATGGGGTGCACTTGGG 6 GCGCTGCCTTGGACTAAGGATGAGGACTAAGGATGGGGTGCACTTGGG 6 GCGCTGCCTTGGGACTAAGGATGGCGCACTTGGGG 6 GCGCTGCCTTGGGACTAAGGATGAGGACTAAGGATGGGGTGCACTTGGG 6 GCGCTGCCTGTTGGACTAAGGATGAGGATGAGGATGAGATGAGGATGAGATGAGATGAGGATGAGATGAGATGAGATGAGATGAGATGAGGATGAGATGAGATGAGATGAGATGAGATGAGATGAGATGAGGATGAGAGATGAGAGATGAGATGAGATGAGATGAGATGAGATGAGATGAGATGAGATGAGATGAGAGATGAGATGAGATGAGATGAGATGAGAGATGAGAGATGAGAGATGAGATGAGAGATGAGATGAGATGAGAGATGAGAGATGAGAGATGAGATGAGAGATGAGAGATGAGATGAGAGATGAGATGAGAGATGAGAGATGAGAGATGAGAGATGAGAGATGAGAGATGAGAGATGAGAGATGAGAGATGAGAGATGAGAGATGAGAGATGAGAGATGAGAGATGAGAGATGAGAGATGAGAGATGAGAGATGAGATGAGAGATGAGAGATGAGAGATGAGAGATGAGAGATGAGAGATGAGAGATGAGAGATGAGAGATGAGATGAGAGATGAGATGAGAGATGA	T C 39	CATGGTCAGCTGGGGTCGTTTCATCTGCCTGGTCGTGGTCACCATGGCAACCTTGTCCCT 33	61 TTCCTGAGCCCACCGCA-GCTGAAGGCATTGCGCGTAGTCCATGCCCGTAAAGGAAGTGT 119 213 GCAGATGGGATTAACGTCCACATGGAGATATGGAAGAAGGACGGGAATTGGTACCGTAAC 272 214 GLAGATGAGATTAACGTCCACATGGAGATATGGAAGAGGACGGGGAATTGGTACCGTAAC 179 110 GCAGATGGGATTAACGTCCACATGGAGATTTGGAAGAGGACCGGGGATTTGGTACCGTAAC 179 120 GCAGATGGGATTAACGTCCACATGGAGATTTGGAAGAGGACCGGGGATTTGGTACCGTAAC 179	
Д Оу Д Оу Д Д	0b Qy 0b Qy	Оу Оу Ор Оу	Db Oy Db	Оу ДЬ Оу	ДЬ Qу ДЬ	Ор Оу	рь Qу рь	Oy Db Oy	Qy Db	0y da	D D
2100 GAAAATAGCAGACTTTGGACTCCCAGAGATATCAACAATATATAGACTATTACAAAAAAACACCCCAGAGACAATATAACACAATATACAAAAAAACACCCCAGAGACACAATATAACACAATAACACAATAACACCAATACCCCAATACACACAATACCCCCAGAACACCCCAGAACACCCCAGAACACCCCAGATACCAATACCCCCAGACCCCTGTTTGATACAACTATACCCCCCACACCACCACCACCACCACCACC	1980 CAAGGACTTGGTGTGATGCACCTACCAGCTGGCCAGAGGCATGGAGTACTTGGCTTCCCA 2039 2133 AAAATGTATTCATCGAGATTTAGCAGCCAGAAATGTTTTTGGTAACAGAAAACAATGTGAT 2192 2141 AAAATGTATTCATCGAGATTTAGCAGCCAGAAATGTTTTTGGTAACAGAAAACAATGTGAT 2192 2040 AAAATGTATTCATCGAGATTTAGCAGCCAGAAATGTTTTTTTT	60 13 20 73	TGCCACAGAGAAAGACCTTTCTGATTCTGGTGTCAGAGATGGAGATGAGGAGATGAGGAGATCTGGCACACAGAGATGAGGAGATGAGGAGATCTGGTGTCTGGAGGACACACAGAGATGAGGAGATGAGGACTCTTCTTGGAGCCTGCACACACA	1773 AGTGGGAATTGACAAAGACAAGCCCAAGGAGGCGGTCACCGTGGCCGTGAAGATGTTGAA 1832	1560 GGCAGGGGTCTCCGAGTATGAACTTCCAGAGGACCCAAAATGGGAGTTTCCAAGAGATAA 1619 1713 GCTGACACTGGGCAAGCCCCTGGGAGAAGGTTGCTTTGGGCAAGAGGTATGGGCAGAGC 1772 1711 HILLIHIHIHIHIHIHIHIHIHIHIHIHIHIHIHIHIHI	1593 CAACACCCCGCTGGTGAGGATAACAACACGCCTCTCTTCAACGGCAGACACCCCCATGCT 1652	1380 GAAGAACACGACCAAGAAGCAGACTTCAGCAGCCAGCCTGTGCCACAAGCTGACCAA 1439 1533 ACGTATCCCCCTGCGGAGACAGGTAACAGTTTCGGCTGAGCTGAGCTCCATGAACTC 1592 11111111111111111111111111111111111	:	3 GCCAGCGCCTGGAAGAGAAAAGGAGATTACAGCTTCCCCAGACTACCTGGAGATAGCCAT	293 TACGTGCTTGGCGGGTAATTCTATTGGGATATCCTTTCACTCTGCATGGTTGACAGTTCT	1140 GGACAAAGAGATTGAGGTTCTCTATATTCGGAATGTAACTTTTGAGGACGCTGGGGAATA 1199

8 8

40 40 40 40 40

\$ 9 P 9

용 6 명

```
δ
                                           밁
                                                           QΥ
                                                                                  밁
                                                                                                     Š
                                                                                                                          В
                                                                                                                                           Š
                                                                                                                                                                   밁
                                                                                                                                                                                   δÃ
                                                                                                                                                                                                          В
                                                                                                                                                                                                                           οy
                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                           망
                                                                                                                                                                                                                                                                                                           δ
     В
                                                                                                                                                                                                                                                                                                                                    ₽
                                                                                                                                                                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                                                                                                                                                         ₽
                                                                                                                                                                                                                                                                                                                                                                                              20
                                                                                                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δÔ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    å
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                    3180
                                                                                                                                               3213
                                                                                                                                                                    3060
                                                                                                                                                                                        3153
                                                                                                                                                                                                           3000
                                                                                                                                                                                                                                3093
                                                                                                                                                                                                                                                                                                                                                                                                                                      2793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2460
                                                                                                                                                                                                                                                   2940
                                                                                                                                                                                                                                                                      3033
                                                                                                                                                                                                                                                                                            2880
                                                                                                                                                                                                                                                                                                                2973
                                                                                                                                                                                                                                                                                                                                    2820
                                                                                                                                                                                                                                                                                                                                                        2913
                                                                                                                                                                                                                                                                                                                                                                           2760
                                                                                                                                                                                                                                                                                                                                                                                                                   2700
                                                                                                                                                                                                                                                                                                                                                                                                                                                           2640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2373
ATGGTATAAGGTTAATTAATTAATTAATTGGTAATATACAAAACAATTAATCATTTATAG
                                                                                                                                                                                                                                               CACATAATTTCTTAATTTTCACCGAGCAGAGGTGGAAAAATACTTTTGCTTTCAGGGAAA
                                                                                           CACATAATTTCTTAATTTTCACCGAGCAGAGGTGGAAAAATACTTTTGCTTTCAGGGAAA
                                                                                                                                   AATGCACCTAGAAAATTGGTCTCTTTTTTTAATAGCTATTTGCTAAATGCTGTTCTTA
                                                                                                                                                               AAATATATATATATATATACAAGGAGTTATTTTTGTATTGATTTTAAATGGATGTCCC
                                                                                                                                                                                                                                                                                                  TAACCCCTCTCACCTGCCGTGCGTGCTGTGGACCAGTAGGACTCAAGGTGGACGTG
                                                                                                                                                                                                                                                                                                                               TAATCTTCCCCAGGAGGAGAAGAAGGTTTCTGGAGCAGTGGACTGCCACAAGCCACCATG
                                                                                                                                                                                                                                                                                                                                           TAATCTTCCCCAGGAGAGAAGAAGGTTTCTGGAGCAGTGGACTGCCACAAGCCACCATG
                                                                                                                                                                                                                                                                                                                                                                                   GAGTAAATAATTGGAAAAGTAATCAGCATATGTGTAAAGATTTATACAGTTGAAAACTTG
                                                                                                                                                                                                                                                                                                                                                                                                                         TGAGCAGGGAGACCATGCCTCCCAGAGCTTGTTGTCTCCACTTGTATATATGGATCAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                      AACATGAATGACTGTGTCTGCCTGTCCCCAAACAGGACAGCACTGGGAACCTAGCTACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGAATGGATAAGCCAGCCAACTGCACCAACGAACTGTACATGATGATGATGAGGGACTGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATGGTATAACGTTAATTAATAAAATTGGTAATATACAAAACAATTAATCATTTATAG
                                                                                                                        AATGCACCTAGAAAATTGGTCTCTTTTTTTAATAGCTATTTGCTAAATGCTGTTCTTA
                                                                                                                                                                                                        ACAGAGCACAAATGCAGTATATAGGTGCTGGATGTATATGTAAATATATGTAT
                                                                                                                                                                                                                                                                                        GAGTAAATAATTGGAAAAGTAATCAGCATATGTGTAAAGATTTATACAGTTGAAAACTTG
                                                                                                                                                                                                                                                                                                                                                                                                               TGAGCAGGGAGACCATGCCTCCCAGAGCTTGTTGTCTCCACTTGTATATATGGATCAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCTAGTTACCCTGACACAAGAAGTTCTTGTTCTTCAGGAGATGATTCTGTTTTTTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCTAGTTACCCTGACACAAGAAGTTCTTGTTCTTCAGGAGATGATTCTGTTTTTTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCTCACTCTCACAACCAATGAGGAATACTTGGACCTCAGCCAACCTCTCGAACAGTATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCTCACTCTCACAACCAATGAGGAATACTTGGACCTCAGCCAACCTCTCGAACAGTATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCATGCAGTGCCCTCCCAGAGACCAACGTTCAAGCAGTTGGTAGAAGACTTGGATCGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCATGCAGTGCCCTCCCAGAGACCCAACGTTCAAGCAGTTGGTAGAAGACTTTGGATCGAAT
                                        3299
                                                                                 3239
                                                                                                    3332
                                                                                                                                            3272
                                                                                                                                                                3119
                                                                                                                                                                                     3212
                                                                                                                                                                                                                             3152
                                                                                                                                                                                                                                                                    3092
                                                                                                                                                                                                                                                                                         2939
                                                                                                                                                                                                                                                                                                             3032
                                                                                                                                                                                                                                                                                                                                2879
                                                                                                                                                                                                                                                                                                                                                     2972
                                                                                                                                                                                                                                                                                                                                                                         2819
                                                                                                                                                                                                                                                                                                                                                                                           2912
                                                                                                                                                                                                                                                                                                                                                                                                                2759
                                                                                                                                                                                                                                                                                                                                                                                                                                    2852
                                                                                                                                                                                                                                                                                                                                                                                                                                                         2699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2579
```

```
밁
                         Qγ
                                                  Вþ
                                                                            8
                                                                                                       Вр
                                                                                                                           Q
                                                                                                                                                                                                             US-08-471-570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 3
US-08-471-570-7
                                                                                                                                                       Query Match
Best Local Similarity
Matches 2261; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 7,
                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, v
CURRENT APPLICATION DATA:
APPLICATION UMBER: US/08/471,570
FILING DATE: 06-JUN-1995
CLASSIFICATION DATA:
APPLICATION NUMBER: US/08/149,664
APPLICATION NUMBER: US/08/149,664
APPLICATION NUMBER: US/07/743369
FILING DATE: 16-AUG-1991
ATTORNEY/AGENT INFORMATION:
NAME: ILINEY FEDSAT V
                                                                                                                                                                                                                                                                                                                      TELEFAX: (617)523-6440
TELEX: 200291 STRE UR
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                               MOLECULE TYPE: FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: PR
NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: IGARASHI,
APPLICANT: SENOO, Mas
APPLICANT: WATANABE,
                                                                                                                                                                                                                                                                                                                                                                           TELEPHONE: (617)523-3400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3453
                             370
                                                                                                                                250
     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET: 130 W
CITY: Boston
STATE: Massac
                                                                                                                                                                                                                      NAME/KEY:
LOCATION:
                                                     13
                                                                                                                                                                                                                                                                                                                                                                                                    NAME: LINEK, Ernest V
REGISTRATION NUMBER: 29
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                          TOPOLOGY:
                                                                                                                                                                                                                                                                                    TYPE: nucleic STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY: U
ZIP: 02109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE: DAVID G. CONLIN;
ADDRESSEE: CUSHMAN
                                                                                                       _
                                                                                                                                                                                                                                                                                                             ENGTH:
GTCACCATGGCAACCTTGTCCCTGGCCCGGCCCTCCTTCAGTTTAGTTGAGGATACCACA
                                                                                                 GGACCGGGGATTGGTACCGTAACCATGGTCAGCTGGGGTCGTTCATCTGCCTGGTCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGCTTGGACTTAACTAGTTATCAGATCCTTTGAAAAGAGAATATTTACAATATATGA 3509
                                                                                                                                                                                                                                                                                                nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       575037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Application US/08471570
                                                                                                                                                                                                                                                                                                             2676 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     130 Water Stréet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PatentIn Release #1.0,
                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                     double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Masaharu
                                                                                                                                                                   51.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PROTEIN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tatsuya
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Koichi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US/08/471,570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US/08/149,66
                                                                                                                                                                                                                                                                                                                                                                                                                29822
                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                     40897
                                                                                                                                                                   Score 2191.2;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DIKE,
                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AND USE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BRONSTEIN, ROBERTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      THEREOR
                                                                                                                                                                              DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        #1.25
                                                                                                                                                                               ۲,
                                                                                                                                                      Indels
                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g-n
                                                                                                                                                                               2676;
                                                                                                                                                      15;
                                                                                                                                                      Gaps
                         429
                                                  120
                                                                           369
                                                                                                    60
                                                                                                                            309
```

ν,

1560	ACCAGCCAGCCGGCTGTGCACAAGCTGACCAAACGTATCCCCCTGCGGAGACAGGTAACA	1501	ρ
1254	GGTGGTAACAGTCATCCTGTGCCGAATGAAGAACACGACCAAGAAGCCAGACT	1195	ф
1500	GTATGGTGGTAACAGTCATCCTGTGCCGAATGAAGAACACGACCAAGAAGCCAGACTT	1441	Qy
-	ACAGCTTCCCCAGACTACCTGGAGATAGCCATTTACTGCATAGGGGTCTTCTTAATCGCC	-	Db
1440	CAGCTTCCCCAGACTACCTGGAGATAGCCATTTACTGCATAGGGGTCTTCTTAATCGC	1381	οy
1134	CACITCISCATGGITGACAGTICISCCAGCGCCIGAAGAGAAAAGGAGATT	1075	B 5
, ,	CCGAGGCGGATGCGGGGAATATATGTAAGGTCTCCAATTATATAGGGCAGG	; ;	2
j N	CTTTTGAGGACGCTGGGGAATATACGTGCTTGGGCGGGTAATTCTATTGGGATATCCT	27	ş 9
1014	CACTCGGGGATAAATAGTTCCAATGCAGAAGTGCTGGCTCTGTTCAATG	961	ğ
1269	GCCGGTGTTAACACCACGGACAAAGAGATTGAGGTTCTCTATATTCGG	1210	Qy
1209 960	CACGTGGAAAAGAACGCAGTAAATACGGGCCCGACGGGCTGCCCTACCTCAAGGTTCTC	11 5 0	DP 6A
900	ACGTAGAGTTTGTCTGCAAGGTTTACAGTGATGCCCAGCCCCACATCCAGTGGATCAAG	841	В
1149	GACGTAGAGTTTGTCTGCAAGGTTTACAGTGATGCCCAGCCCCACATCCAGTGGATCAAG	1090	Qy
840	CTCACCGGCCATCCTCCAAGCCGGACTGCCGGCAAATGCCTCCACAGTGGTCGGAGGA	781	Db
1089	CACCGGCCCATCCTCCAAGCCGGACTGCCGGCAAATGCCTCCACAGTGGTCGGAGG	1030	δ
0		N	В,
1029	GAGAATGAATACGGGTCCATCAATCACACGTACCACCTGGATGTTGTGGAGCGATC		Ş
720	CACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCTGACAAGGGAAATTATACCCTGTGTG	661	B 5
h c	プログライン とうこうほう トローター アー・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・		2 5
909	AAAAACGGGAAGGTTTAAGCAGGAGCATCGCATTGGAGGCTACAAGGTACGAAACCAG [850	ş
600	ACTGTCAAGTTTCGCTGCCCAGCCGGGGGGAACCCAATGCCAACCATGCGGTGGCTG	541	В
849	AACACTGTCAAGTTTCGCTGCCCAGCCGGGGGGAACCCAATGCCAACCATGCGGTGGCTG	790	οy
789 540	GCACCATACTGGACCAACACAGAAAAGATGGAAAAGCGGCTCCATGCTGTGCCTGCGGCC	730 481	gg Qy
480	ATGAGGATGACACCGATGGTGCGGAAGATTTTGTCAGTGAGAACAGTAACAACAAGAGA	421	Д
729	GATGAGGATGACACCGATGGTGCGGAAGATTTTTGTCAGTGAGAACAGTAACAACAAGAGA	670	Ş
420	GTAGACAGTGAAACTTGGTACTTCATGGTGAATGTCACAGATGCCATCTCATCCGGAGAT	361	Db
669	TAGACAGTGAAACTTGGTACTTCATGGTGAATGTCACAGATGCCATCTCATCCGGAGAT	610	Ş
9		Ö i	B :
609	AGATAAAGGGCGCCACGCCTAGAGACTCCCGGCCTCTATGCTTGTACTGCCAGTAGGACT		ó
549 300	ACTAAGGATGGGGTGCACTTGGGGGCCCAACAATAGGACAGTGCTTATTGGGGAGTACTTG	490 241	B 5
240	CCCCAGGGGAGTCGCTAGAGGTGCGCCGCCTGTTGAAAGATGCCGCCGTGATCAGTTGG	181	рb
489	CGCCAGGGGAGTCGCTAGAGGTGCGCTGCCTGTTGAAAGATGCCGCCGTGATCAGTTGG	430	Qy

Db :	Qy	_	Qy				Qy :			Db 1		Db 1	Qy :	Db 1	Qy 2		Qy 2	pb 1	Qy 1	Db 1		Db 1		Db 1			Qy 1			Db 1	0y 1	Дb 1		ם מם
2275		2215	2461	2155	40	2095	2341	2035	2281	1975	2221	1915	2161	1855	ĭ	1795	2041	1735	1981		9	1615		1555	1001		7	4	68	1375	6	315	561	255
CAAGCAGTTGGTAGAAGACTTGGATCGAATTCTCACTCTCACAACCAATG	GCAGTTGGTAGAAGACTTGGATCGAATTCTCACTCTCACAACCAAT	CGAACTGTACATGATGATGAGGGACTGTTGGCATGCAGTGCCCTCCCAGAGACCCA	CTGTACATGATGATGAGGGACTGTTGGCATGCAGTGCCCTCCCAGAGACCA	GAACTTTTTAAGCTGCTGAAGGAAGGACACAGAATGGATAAGCCCAGCCAACTGCA	AGGAACTTTTTAAGCTGCTGAAGGAAGGACACAGAATGGATAAGCCAGCC	GGGTGTTAATGTGGGAGATCTTCACTTTAGGGGGGCTCGCCCTACCCAGGGATTCCCGT	GGGGTGTTAATGTGGGAGATCTTCACTTTAGGGGGCTCGCCCTACCCAGGGATTTCCCGTG 2	TGGCTCCAGAAGCCCTGTTTGATAGAGTATACACTCATCAGAGTGATGTCTGGTCCTT	ATGGCTCCAGAAGCCCTGTTTGATAGAGTATACACTCATCAGAGTGATGTCTGGTCCTTC 2	ATCAACAATATAGACTATTACAAAAAAGACCACCAATGGGCGGCTTCCAGTCAAGTG	GATATCAACAATATAGACTATTACAAAAAGACCACCAATGGGCCGGCTTCCAGTCAAGTGG 2	AAATGTTTTGGTAACAGAAAACAATGTGATGAAAATAGCAGACTTTGGACTCGCCAG	AGAAATGTTTTGGTAACAGAAAACAATGTGATGAAAATAGCAGACTTTTGGACTCGCCAGA 2	AGATTTAGCAG	TGGCCAGAGGGCATGGAGTACTTGGCTTCCCAAAAAATGTATTCATCGAGATTTAGCAGC	ATTAACCGTGTTCCTGAGGAGCAGATGACCTTCAAGGACTTGGTGTCATGCACCTACCAG	AACCGTGTTCCTGAGGAGCAGATGACCTTCAAGGACTTGGTGTCATGCACCTACC	GGCAACCTCCGAGAATACCTCCGAGCCCGGAGGCCACCGGGATGGAGTACTCCTATGAC	GCAACCTCCGAGAATACCTCCGAGCCCGGAGGCCACCCGGGATGGAGTACTCCT	CTTCTTGGAGCCTGCACACAGGATGGGCCTCTCTATGTCATAGTTGAGTATGCCTCTAAA 1	TTCTTGGAGCCTGCACACACAGGATGGGCCTCTCTATGTCATAGTTGAGTATGCCTCTAA	AATATCATAAA	ATCTGGTGTCAGAGATGGAGATGATGAAGATTGGGAAACACACAGAATATCAT	GAGGCGGTCACCGTGGCCGTGAAGATGTTGAAAGATGATGCCACAGAGAAAAGACCTTTCT	AGGCGGTCACCGTGGCCGTGAAGATGTTGAAAGATGATGCCACAGAGAAAGACCTTTC	- ≩	GTTGCTTTGGGCAAGTGGTCATGGCGGAAGCAGTGGGAATTGACAAAGACAAGCCC	AGTTTCCAAGAGATAAGCTGACACTGGGCAAGCCCCTGGGAG	AGGACCCAAAATGGGAGTTTCCAAGAGATAAGCTGACACTGGGCAAGCCCCTGGGA	CAGGGTCTCCGAGTATGAACTTCC	GCCTCTCTTCAACGGCAGACACCCCCCATGCTGGCAGGGGTCTCCCGAGTA:	GTTTCGGCTGAGTCCAGCTCCTCCATGAACTCCAACACCCCGCTGGTGAGGATAACAACA	TCGGCTGAGTCCAGCTCCTCCATGAACTCCAACACCCCGGTGGTGAGGATAACAAC	AGCAGCCAGCCGGCTGTGCACAAGCTGACCAAACGTATCCCCCTGCGGAGACAGGTAACA 1
		274	520	214	460	154	400	094	340	034	280	974	220	914	160	854	100	794	040	734	980	674	920	614	860	554	800	494	740	434	089	374	620	314

540 789

600 849 669

420

729

609

360

```
γo
                                                                                           Вb
                                                                                                                    δÃ
                                                                                                                                                                    δ
                                             망
                                                                                                                                               В
                                                                                                                                                                                                  В
                                                                                                                                                                                                                        Š
                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 07/743
FILING DATE: 16-AUG-1991
ATTORNEY/AGENT INFORMATION:
NAME: LINEK, Ernest V
REGISTRATION NUMBER: 29822
REFERENCE/DOCKET NUMBER: 4089
TELEPHONE: (617)523-3400
TELEPHONE: (617)523-3400
TELEPAX: (617)523-6440
TELEPAX: (617)523-6440
TELEYAX: (617)523-640
TELEYAX: (617)523-640
TELEYAX: (617)523-640
TELEYAX: (617)523-640
TELEYAX: (617)523-640
TELEYAX: (617)523-640
TELEYAX: 1000-5:
SEQUENCE CHARACTERISTICS:
LENGTH: 1954 base pairs
                                                                                                                                                                                                                                                  Query Match 42.6%;
Best Local Similarity 96.3%;
Matches 1887; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 5, Application US/08471570 Patent No. 5750371 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTION PATA:
CURRENT APPLICATION DATA:
APPLICATION UMBER: US/08/471,570
FILING DATE: 06-JUN-1995
CLASSIFICATION UMBER: US/08/149,664
APPLICATION UMBER: US/08/149,664
FILING DATE: MATA:
APPLICATION UMBER: US/08/149,664
FILING DATE: MATA:
APPLICATION UMBER: US/08/149,664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -08-471-570-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE: DAVID G. CONLIN; DIKE, BI
ADDRESSEE: CUSHMAN
STREET: 130 Water Street
CITY: Boston
STATE: Massachusetts
COUNTRY: US
ZIP: 02109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: SENOO, Masaharu
APPLICANT: WATANABE, Tatsuya
TITLE OF INVENTION: PROTEIN, DNA
NUMBER OF SEQUENCES: 18
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                            FEATURE:
                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: cDNA
                     490
                                                                                                                                                                                              181
                                                                      430
                                                                                               121
                                                                                                                        370
                                                                                                                                                                        310
                                                                                                                                                                                                                                                                                                                  NAME/KEY:
LOCATION:
                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                     STRANDEDNESS:
TOPOLOGY: lin
                                        GCGCCAGGGGAGTCGCTAGAGGTGCGCTGCCTGTTGAAAGATGCCGCCGTGATCAGTTGG
                                                                                           ACTAAGGATGGGGTGCACTTGGGGCCCCAACAATAGGACAGTGCTTATTGGGGAGTACTTG
                                                                                                                                                                                                                                                                                                                                                                                            nucleic acid
                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IGARASHI, Koichi
                                                                                                                                                                                                                                                                                                                                                                                 double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US 07/743369
-1991
                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                               Score 1817.2;
Pred. No. 0;
                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AND USE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BRONSTEIN, ROBERTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 THEREOF
                                                                                                                                                                                                                                                                           DB 1;
                                                                                                                                                                                                                                                  58;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  . 25
                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                         Length 1954;
                                                                                                                                                                                                                                                  15;
                                                                    489
                                                                                                                    429
                  549
                                          240
                                                                                            180
                                                                                                                                                                                                60
                                                                                                                                                                                                                                                 2;
                                                                                                                                                                                                                               οy
                                                                             δõ
     밁
                          Š
                                                      밁
                                                                                                       В
                                                                                                                               Š
                                                                                                                                                        밁
                                                                                                                                                                                Ş
                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                   δõ
                                                                                                                                                                                                                                                                                                                                     Š
                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                    용
                                                                                                                                                                                                                                                                                                                                                                                                                                         οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ρ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  몽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                        1135
     1315
                                                                                                        1195
                                                                                                                                                                                                          1075
                                                                                                                                                                                                                                                             1015
                                                                                                                                                                                                                                                                                      1270
                                                                                                                                                                                                                                                                                                                                        1210
                                                                                                                                                                                                                                                                                                                                                                                                                                           1090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1030
                                                                                                                                                                                                                                                                                                              961
                                                                                                                                                                                                                                                                                                                                                                 901
                                                                                                                                                                                                                                                                                                                                                                                                                   841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
CCTCACCGGCCCATCCTCCAAGCCGGACTGCCGGCAAATGCCTCCACAGTGGTCGGAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGGAGAATGAATACGGGTCCATCAATCACACGTACCACCTGGATGTTGTGGAGCGATCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCTGACAAGGGAAATTATACCTGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCACCATACTGGACCAACACAGAAAAGATGGAAAAGCGGCTCCATGCTGTGCCTGCGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTAGACAGTGAAACTTGGTACTTCATGGTGAATGTCACAGATGCCATCTCATCCGGAGAT
                                                                AGCAGCCAGCCGGCTGTGCACAAGCTGACCAAACGTATCCCCCTGCGGAGACAGGTAACA
                                                                                                                 TGTATGGTGGTAACAGTCATCCTGTGCCGAATGAAGAACACGACCAAGAAGCCAGACTTC
                                                                                                                                                                                                                   CACTCTGCATGGTTGACAGTTCTGCC-----AGCGCCTGGAAGAGAAAAGGAGATT
                                                                                                                                                                                                                                                         AAGGCCGCCGGTGTTAACACCACGGACAAAGAGATTGAGGTTCTCTATATTCGGAATGTA 1269
                                                                                                                                                                                                                                                                                                                                                                                                                             GACGTAGAGTTTGTCTGCAAGGTTTACAGTGATGCCCAGCCCCACATCCAGTGGATCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AACACTGTCAAGTTTCGCTGCCCAGCCGGGGGGAACCCAATGCCAACCATGCGGTGGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGTATGGTGGTAACAGTCATCCTGTGCCGAATGAAGAACACGACCAAGAAGCCAGACTTC
                                                                                                                                                                                                          CAGTCTGCCTGGCTCACTGTCCTGCCAAAACAGCAAGCGCCTGGAAGAGAAAAGGAGATT
                                                                                                                                                                                                                                                                                                                                                                                                                GACGTAGAGTTTGTCTGCAAGGTTTACAGTGATGCCCAGCCCCACATCCAGTGGATCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGATAAAGGGCGCCACGCCTAGAGACTCCGGCCTCTATGCTTGTACTGCCAGTAGGACT
                                                  AGCAGCCAGCCGGCTGTGCACAAGCTGACCAAACGTATCCCCCTGCGGAGACAGGTAACA
                                                                                                                                                                                                                                                                                                            AAGCACTCGGGGATAAATAGTTCCAATGCAGAAGTGCTGGCTCTGTTC-----AATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAAAACGGGAAGGAGTTTAAGCAGGAGCATCGCATTGGAGGCTACAAGGTACGAAACCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AACACTGTCAAGTTTCGCTGCCCAGCCGGGGGGAACCCAATGCCAACCATGCGGTGGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACTAAGGATGGGGTGCACTTGGGGGCCCAACAATAGGACAGTGCTTATTGGGGAGTACTTG
```

Š

1314 1560 1254 1500 1194 1440 1380

1014

1209

900

960

1089

840

1029

720 969 660 909

780

1149

Ş 밁 á

밁

```
RESULT 5
US-08-471-570-9
                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 9, Application US/08471570 Patent No. 5750371 GENERAL INFORMATION:
                                                                                                             ZIP: 02109
COMPUTER READABLE FORM:
MEDIIM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                              ADDRESSEE: DAVID G. CONLIN; D. ADDRESSEE: CUSHMAN STREET: 130 Water Street CITY: Boston STATE: Massachusetts COUNTRY: US
                                                                                                                                                                                                                                                                                                                                APPLICANT: SENOO, MASAHATU
APPLICANT: WATANABE, TATSUYA
TITLE OF INVENTION: PROTEIN, DNA
NUMBER OF SEQUENCES: 18
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1981
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1801
                                                                 APPLICATION NUMBER: US/08/471,570 FILING DATE: 06-JUN-1995 CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGGACCCAAAATGGGAGTTTCCAAGAGATAAGCTGACACTGGGCAAGCCCCTGGGAGAA 1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGCCTCTCTCAACGGCAGACACCCCCATGCTGGCAGGGGTCTCCGAGTATGAACTTCCA 1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGAAATGTTTTGGTAACAGAAAACAATGTGAAGAAATAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGCAACCTCCGAGAATACCTCCGAGCCCGGAGGCCACCCGGGATGGAGTACTCCTATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTTCTTGGAGCCTGCACACAGGATGGGCCTCTCTATGTCATAGTTGAGTTATGCCCTCTAAA 1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GATCTGGTGTCAGAGATGGAGATGATGAAGATGATTGGGAAACACAAGAATATCATAAAT 1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGGCGGTCACCGTGGCCGTGAAGATGTTGAAAGATGATGCCACAGAGAAAGACCTTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGTTGCTTTGGGCAAGTGGTCATGGCGGAAGCAGTGGGAATTGACAAAGACAAGCCCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGGACCCAAAATGGGAGTTTCCAAGAGATAAGCTGACACTGGGCAAGCCCCTGGGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGAAATGTTTTGGTAACAGAAAACAATGTGATGAAAATAG 2200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTAACCGTGTTCCTGAGGAGCAGATGACCTTCAAGGACTTGGTGTCATGCACCTACCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTAACCGTGTTCCTGAGGAGCAGATGACCTTCAAGGACTTGGTGTCATGCACCTACCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGCAACCTCCGAGAATACCTCCGAGCCCGGGAGGCCACCCGGGATGGAGTACTCCTATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTTCTTGGAGCCTGCACACAGGATGGGCCTCTCTATGTCATAGTTGAGTATGCCTCTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGGCGGTCACCGTGGCCGTGAAGATGTTGAAAGATGATGCCACAGAGAAAGACCTTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGCCTCTCTTCAACGGCAGACACCCCCCATGCTGGCAGGGGTCTCCGAGTATGAACTTCCA 1434
                                                                                                                                                                                                                                                                                                                                                                                                                    IGARASHI, Koichi
 US 07/743369
                                  US/08/149,664
                                                                                                                                                                                                                                                                                                                    DIKE,
                                                                                                                                                                                                                                                                                                                                                                    AND USE THEREOF
                                                                                                                                                                                                                                                                                                                    BRONSTEIN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1954
                                                                                                                                                                                                                                                                                                                    ROBERTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1794
                                              Q
                                                                                  밁
                                                                                                               Ş
                                                                                                                                               밁
                                                                                                                                                                              Q
                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                  망
                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                               Ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ŷ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; NAME/KEY:
; LOCATION:
US-08-471-570-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 16-AUG-1991
ATTORNEY/AGENT INFORMATION:
NAME: LINEK, Ernest V
REGISTRATION NUMBER: 29822
REFERENCE/DOCKET NUMBER: 40897
TELECOMMUNICATION INFORMATION:
TELEPAN: (617)523-3400
TELEFAX: (617)523-3440
TELEFAX: 200291 STRE UR
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
LENGTH: 2310 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 1778; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                   1028
                                                 1379
                                                                                                                                                                                                                                                                                                                  1148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY: 11
MOLECULE TYPE:
                                                                                                                                                                                                                                                   1208
                                                                                                                                                                                1268
                                                                                                                                                                                                                                                                                                                                                                                   8801
                  788
                                                                                                                                                 899
                                                                                                                                                                                                                614
                                                                                                                                                                                                                                                                                   554
                                                                                                                                                                                                                                                                                                                                                   494
                                                                                                                                                                                                                                                                                                                                                                                                                  434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                896
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: nucleic acid
STRANDEDNESS: double
                              TTACAGCTTCCCCAGACTACCTGGAGATAGCCATTTACTGCATAGGGGTCTTCTTAATCG 1438
                                                                                                                                                                                                                                                                                                                                                                  GAGACGTAGAGTTTGTCTGCAAGGTTTACAGTGATGCCCAGCCCCACATCCAGTGGATCA 1147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGAAAAACGGGAAGGAGTTTAAGCAGGAGCATCGCATTGGAGGCTACAAGGTACGAAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCAACACTGTCAAGTTTCGCCTGCCCAGCCGGGGGGAACCCAATGCCAACCATGCGGTGGC
                                                                                               TTCACTCTGCATGGCTTGACAGTTCTGCC------AGCGCCTGGAAGAGAAAAGGAGA 1378
                                                                                                                                                                    TAACTTTTGAGGACGCTGGGGAATATACGTGCTTGGCGGGTAATTCTATTGGGATATCCT 1327
                                                                                                                                                                                                                                                 TCAAGGCCGCCGGTGTTAACACCACGGACAAAGAGATTGAGGTTCTCTATATTCGGAATG 1267
                                                                                                                                                                                                                                                                                                   AGCACGTGGAAAAGAACGGCAGTAAATACGGGCCCGACGGGCTGCCCTACCTCAAGGTTC 1207
                                                                                                                                                                                                                                                                                                                                                                                                                                 CGCCTCACCGGCCCATCCTCCAAGCCGGACTGCCGGCAAATGCCTCCACAGTGGTCGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGCACCATACTGGACCAACACAGAAAAGATGGAAAAGCGGCTCCATGCTGTGCCTGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAGCACCATACTGGACCAACACACAAAAAGATGGAAAAAGCGGCTCCATGCTGTGCCTGCGG
                                                                                                                                                                                                                TCAAGCACTCGGGGATAAATAGTTCCAATGCAGAAGTGCTGGCTCTGT-----TCAATG
                                                                                                                                                                                                                                                                                   AGCACGTGGAAAAGAACGGCAGTAAATACGGGCCCGACGGGCTGCCCTACCTCAAGGTTC
                                                                                                                                                                                                                                                                                                                                                   GAGACGTAGAGTTTGTCTGCAAGGTTTACAGTGATGCCCAGCCCCACATCCAGTGGATCA
                                                                                                                                                                                                                                                                                                                                                                                                                  CGCCTCACCGGCCCATCCTCCAAGCCGGACTGCCGGCAAATGCCTCCACAGTGGTCGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGCACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCTGACAAGGGAAATTATACCTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGAAAAACGGGAAGGATTTAAGCAGGAGCATCGCATTGGAGGCTACAAGGTACGAAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCAACACTGTCAAGTTTCGCTGCCCAGCCGGGGGGAACCCAATGCCAACCATGCGGTGGC
                                                                                                                                               TGACCGAGGCGGATGCTGGGGAATATATATGTAAGGTCTCCAATTATATAGGGCAGGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                39.7%;
95.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 40897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 1692.8;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                57;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2310;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                 1087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 193
                                                                                                                                                                                                                667
                                                                                                                                                                                                                                                                                  613
                                                                                                                                                                                                                                                                                                                                                   553
                                                                                                                                                                                                                                                                                                                                                                                                                  493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 253
```

Ş g δÃ 밁 Ş

B

Ş ₽ õ 밁 ş рь õ В ő

ω

В

밁

1922 CGTTCAAGCAGTTGGTAGAAGACTTGGATCGAATTCTCACTCTCACAACCAATGAG

1977

```
2519
                           1862
                                                                                                 2399
                                                                                                                          1742
                                                                                                                                                   2339
                                                                                                                                                                          1682
                                                                                                                                                                                                  2279
                                                                                                                                                                                                                                                                                                                                                                            1442
                                                                                                                                                                                                                                                                                                                                                                                                                                                   1979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1322
                                                                           1802
                                                                                                                                                                                                                          1622
                                                                                                                                                                                                                                                   2219
                                                                                                                                                                                                                                                                          1562
                                                                                                                                                                                                                                                                                                   2159
                                                                                                                                                                                                                                                                                                                           1502
                                                                                                                                                                                                                                                                                                                                                 2099
                                                                                                                                                                                                                                                                                                                                                                                                                           1382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1082
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           848
CGTTCAAGCAGTTGGTAGAAGACTTGGATCGAATTCTCACTCTCACAACCAATGAG
                                                                                                                                                                                                                     GAGATATCAACAATATAGACTATTACAAAAAGACCACCAATGGGCGGCTTCCAGTCAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCAACGAACTGTACATGATGATGAGGACTGTTGGCATGCAGTGCCCTCCCAGAGAGACCAA
                                                                                                                    GGATGGCTCCAGAAGCCCTGTTTGATAGAGTATACACTCATCAGAGTGATGTCTGGTCCT
                                                                                                                                                                                                                                                                     CCAGAAATGTTTTGGTAACAGAAAACAATGTGATGAAAATAGCAGACTTTGGACTCGCCCA
                                                                                                                                                                                                                                                                                                                                                                      ATCTTCTTGGAGCCTGCACACAGGATGGGCCTCTCTATGTCATAGTTGAGTATGCCTCTA 1978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCAGCAGCCAGCCGGCTGTGCACAAGCTGACCAAACGTATCCCCCTGCGGAGACAGGTAA 1558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCAACGAACTGTACATGATGATGAGGGACTGTTGGCATGCAGTGCCCTCCCAGAGACCAA
                                                                                  AGCTGGCCAGAGGCATGGAGTACTTGGCTTCCCAAAAATGTATTCATCGAGATTTAGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                     AAGGCAACCTCCGAGAATACCTCCGAGCCCGGAGGCCACCCGGGATGGAGTACTCCTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAGGTTGCTTTGGGCAAGTGGTCATGGCGGAAGCAGTGGGAATTGACAAAGACAAAGCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGAGGACCCAAAATGGGAGTTTCCAAGAGATAAGCTGACACTGGGCAAGCCCCTGGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CACGCCTCTCTTCAACGGCAGACACCCCCATGCTGGCAGGGGTCTCCGAGTATGAACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                       AAGGCAACCTCCGAGAATACCTCCGAGCCCGGGAGGCCACCCGGGATGGAGTACTCCTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGGAGGCGGTCACCGTGGCCGTGAAGATGTTGAAAGATGATGCCACAGAGAAAAGACCTTT 1858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGAGGACCCAAAATGGGAGTTTCCAAGAGATAAGCTGACACTGGGCAAGCCCCTGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CACGCCTCTCTTCAACGGCAGACACCCCCCATGCTGGCAGGGGTCTCCGAGTATGAACTTC
                                                                       AGCTGGCCAGAGGCATGGAGTACTTGGCTTCCCAAAAATGTATTCATCGAGATTTAGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGGAGGCGGTCACCGTGGCCGTGAAGATGTTGAAAGATGATGCCACAGAGAAAGACCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGGTTGCTTTGGGCAAGTGGTCATGGCGGAAGCAGTGGGAATTGACAAAGACAAGCCCA
                                               2518
                                                                                                                      1801
                                                                                                                                              2398
                                                                                                                                                                      1741
                                                                                                                                                                                               2338
                                                                                                                                                                                                                        1681
                                                                                                                                                                                                                                             2278
                                                                                                                                                                                                                                                                      1621
                                                                                                                                                                                                                                                                                               2218
                                                                                                                                                                                                                                                                                                                       1561
                                                                                                                                                                                                                                                                                                                                               2158
                                                                                                                                                                                                                                                                                                                                                                        1501
                                                                                                                                                                                                                                                                                                                                                                                                                       1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1021
                                                                                                                                                                                                                                                                                                                                                                                                2098
                                                                                                                                                                                                                                                                                                                                                                                                                                                2038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1618
```

οy

S B

0y 0y 0y

В QΥ В Qy 밁 δõ ₽ Ωy 밁 γO 밁 δ 밁 Ş 밁 γ В Ş 밁 õ B Q B γ В õ DЬ Ş

닭

```
CURKEMT APPLICATION DATA:
APPLICATION NUMBER: US/08/070,165F
FILING DATE:
CLASSIFICATION: 435
TELEPHONE: (614)-293-8093
TELEPHONE: (614)-293-5631
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 2675 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: cDNA
HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: NO. 5750365ophthalmus viridescens
DEVELOPMENTAL STAGE: Adult
TISSUE TYPE: Regenerating forelimb blastema
IMMEDIATE SOURCE:
LIBRARY: lambda 9t11
CLONE: KP23-1
POSITION IN GENOME:
UNITS: bp
FEATURE:
NAME/KEY: 5'UTR
LOCATION: 1.324
FEATURE:
NAME/KEY: CDS
LOCATION: 325..2511
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 6
US-08-070-165F-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 5, Application US/08070165F Patent No. 5750365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ZIP: 43210

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, VG
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
APPLICANT: Chiu, Ing-Ming
APPLICANT: Poulin, Matthew L
TITLE OF INVENTION: Acidic Fibroblast
NUMBER OF SEQUENCES: 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STREET: S2052 Davis Medical Research Ce
STREET: 9th Avenue
CITY: Columbus
STATE: Ohio
COUNTRY: USA
                                                                                                                                                                           FEATURE:
NAME/KEY:
LOCATION:
                                                                                                                                                         PUBLICATION INFORMATION:
              AUTHORS: Poulin, Matthew L
TITLE: Nucleotide sequences of two newt
TITLE: (No. 5750365ophthalmus viridescens)
TITLE: factor receptor-2 variants
JOURNAL: Biochim. Biophys. Acta
VOLUME: 1220
PAGES: 209-211
DATE: 1994
DATE: 1994
   RELEVANT RESIDUES
                                                                                                                                                                         3'UTR
2512..2675
   Z
 SEQ
 Ę
 Š.
 <u>ن</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Version
FROM 1 TO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Growth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Center,
                                                                                                       fibroblast
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Factor
 2675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (aFGF)
                                                                                                     growth
```

	ŞQ.	g Qq	Оy	ру	Оу	g Q	Оy	D 69	ОУ	Оy	g Qy	gg Qg	Оy	dd YQ	Оу	B 8	P 9	g Qy	3 a 0
· · · ·	Qy 1668 GTATGAACTTCCAGAGGACCCAAAATGGGAGTTTCCAAGAGATAAGCTGACACTGGGCAA 1727	QY 1608 GAGGATAACAACACCCCCTCTTCTAACGGCAGACACCCCCATGCTGGCAGGGGTCTCCGA 1667	QY 1548 GAGACAGGTAACAGTTTCGGCTGACTCCAGCTCCCATGAACACCTCCAGCCCGCTGGT 1607	QY 1488 GAAGCCAGACTTCAGCAGCCAGCCGGCTGTGCACAAGCTGACCAAACGTATCCCCCTGCG 1547	1428 CTTCTTAATCGCCTGTATGGTGGTAACAGTCATCCTGTGCCGAATGAAGAACACGACCAA 	1368 1149	1308 TAATTCTATTGGGATATCCTTTCACTCTGCATGGTTGACAGTTCTGCCAGGGCCTGGAAG	1248 1029	OY 1188 GCTGCCCTACCTCAAGGTTCTCAAGGCCGCGGTGTTAACACCACGGACAAAGAGATTGA 1247	QY 1128 GCCCCACATCCAGTGGATCAAGCACGTGGAAAAGAACGGCAGTAAATACGGGCCCGACGG 1187	QY 1068 TGCCTCCACAGTGGTCGGAGAGAGCTAGAGTTTGTCTGCAAGGTTTACAGTGATGCCCA 1127	OY 1008 CCTGGATGTTGTGGAGCGATCGCCTCACCGGCCCATCCTCCAAGCCGGACTGCCGGCAAA 1067	Qy 948 CANGGGAAATTATACCTGTGTGGGGGGAGAATGAATACGGGTCCATCAATCA	QY 888 AGGCTACAAGGTACGAAACCAGCAGCAGCGTGAGCCTCATTATGGAAAGTGTGGTCCCATCTGA 947	QY 828 AATGCCAACCATGCGGTGGCTGAAAAACGGGAAGGAGTTTAAGCAGGAGCATCGCATTGG 887	QY 768 GCTCCATGCTGTGCCTGCGGCCAACACTGTCAAGTTTCGCTGCCCAGCCGGGGGGAACCC 827	QY 708 TGAGAACAGTAACAAGAGAGAGACACATACTGGACCAACACAGAAAAGATGGAAAAGCC 767	Qy 648 AGATGCCATCTCATCCGGAGATGATGAGAGATGACACCGATGGTGGGGAAGATTTTGTCAG 707	Ouery Match 32.0%; Score 1367.6; DB 1; Length 2675; Best Local Similarity 79.1%; Pred. No. 0; Matches 1654; Conservative 0; Mismatches 429; Indels 9; Gaps 2;
									_										
	RESULT	Db 45	Db Oy	Db Q	Qy Db	Db Qy	Qy db	Ωy	р Q	Ωb	Оу	Db U9	Db 09	Db Qy	dd dy	рр	99	P 4	D D
	זנד 7	2000 CHANCHAIGHCETCAGIAICACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	2 13 0	CARTGAGGAATACTTGGACCTCAGCGAACCTCTGGAGCAGCTATTCACCTAGTTACCCTGA	08 CCAGAGACCAACGTTCAAGCAGTTGGTAGAAGACTTGGATCGAATTCTCACTCTCACCAAC	2448 AGCCAACTGCACCAACGAACTGTACATGATGATGAGGACTGTTGGCATGCAGTGCCCTC 2507	AGGGATTCCCGTGGAGGAACTTTTTAAGCTGCTGAAGGAAG	2328 TGTCTGGTCCTTCGGGGGTGTTAATGTGGGAGATCTTCACTTTAGGGGGCCTCGCCCTACCC 2387	2268 TCCAGTCAAGTGGATGGCTCCAGAAGCCCTGTTTGATAGAGTATACACTCATCAGAGTGA 2327	TIGGACTICGCCAGGATATICAACAATATAGACTATTAGAAAAAGACCACCAATGGGCGGCTT	AGATTAGCAGCCAGAAATGTTTTGGTAACAGAAAACAATGTGATGAAAATAGCAGACTT 	A TIGGACCTACCAGCIGGGGAGAGCATIGGAGTACCTTGGCTTCCCAAAAATIGTATTCATCG	GIACICCIATIGACATICACCSIGITICCIGAGGAGCAGATIGACCITICAAGGACTIGGIGIC	GTATGCCTCTAAAGGCAACCTCCGAGAATACCTCCGAGCCGGCAGGCCACCCGGGATGA	GATTATCATAAATCTTCTTGGGGCCTGCACACAGGATGGGCCTCTGTGTCGATAGTTGATAGTTGATTGA	B48 GAAAGACCTTTCTGATCTGGTGTCAGAGATGGGAGATGATGATAGGAAGATGATTGGGAAGACACAA			

```
Š
                                                                  US-08-885-418-5
                                                                                NAME/KEY: 3'UTR
LOCATION: 2512..2675
PUBLICATION: POULIN, Matthew L
AUTHORS: Poulin, Matthew L
TITLE: (No. 5925528ophthalmus viridescens) fibroblast growth
TITLE: factor receptor-2 variants
JOURNAL: Biochim. Biophys. Acta
VOLUME: 1220
PAGES: 209-211
DATE: 1994
                                                                                                                                                                                                                                                                                                                                                                                                                TELECOMMUNICATION: 435
CLASSIFICATION: 435
TELECOMMUNICATION INFORMATION:
TELEPHONE: (614)-293-8093
TELEFAX: (614)-293-5631
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 2675 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
                                  Query Match
Best Local :
                      Best Local Similarity 79. Matches 1654; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 5, Application US/08885418 Patent No. 5925528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                               FEATURE:
NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Chiu, Ing-Ming
APPLICANT: Poulin, Matthew L
TITLE OF INVENTION: Acidic Fibroblast Growth Factor (aFGF)
NUMBER OF SEQUENCES: 12
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                      HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: No. 5925528ophthalmus viridescens
DEVELOPMENTAL STACE: Adult
TISSUE TYPE: Regenerating forelimb blastema
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/885,418
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET: 9th Avenue CITY: Columbus STATE: Ohio COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                 MOLECULE TYPE: CL
                                                                                                                                                                                                                                        FEATURE:
                                                                                                                                                                                                                                                                                POSITION IN UNITS: b
                                                                                                                                                                                                                                                                                                                         MMEDIATE SOURCE:
648 AGATGCCATCTCATCCGGAGATGATGAGGATGACACCGATGGTGCGGAAGATTTTGTCAG
                                                                                                                                                                                                                                                                                                     LIBRARY:
CLONE: F
                                                                                                                                                                                                                                                                                                                                  CELL TYPE: Mesenchyme and
                                                                         DATE: 1994
RELEVANT RESIDUES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     43210
                                                                                                                                                                                                                                                                                                      KP23-1
                                                                                                                                                                                                                                                                                          GENOME:
                                                                                                                                                                                                                                               5'UTR
1..324
                                                                                                                                                                                                                                                                                                              lambda gt11
                                                                                                                                                                                                                                                                                                                                                                                                              CDNA
                                                                        IN SEQ
                                32.0%;
79.1%;
                                                                        IJ
                     0;
                    Score 1367.6;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                    Epithelium
                                                                        .
0
                                                                        <u>ن</u>
                                                                        FROM 1
                     429;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              B
                                                                        ö
                                         2
                                                                        2675
                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        West
                     9;
                    Gaps
707
       Ş
                                                Q
                                                                                         δÃ
                                                                                                                                    Š
                                                                                                                                                          맑
                                                                                                                                                                                                   В
                                                                      밁
                                                                                                                B
                                                                                                                                                                             Š
                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                οy
                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                   Q
                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       몽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            â
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
        1728
                              1443
                                                                                                                                                                                                    1203
                                                                                                                                                                                                                                             1149
                                                                                                                 1323
                                                                                                                                     1548
                                                                                                                                                                                                                                                                  1368
                                                                                                                                                                                                                                                                                        1089
                                                                                                                                                                                                                                                                                                            1308
                                                                                                                                                                                                                                                                                                                                 1029
                                                                                                                                                                                                                                                                                                                                                                                               1188
                                                                                                                                                                                                                                                                                                                                                                                                                                          1128
                                                                                                                                                                                                                                                                                                                                                       1248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1008
                                                                                                                                                                                1488
                                                                                                                                                                                                                                                                                                                                                                           969
                                                                                                                                                                                                                                                                                                                                                                                                                    909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              708
```

```
GAGACAGGTAACAGTTTCGGCTGAGTCCAGCTCCTCCATGAACTCCAACACCCCCGCTGGT
                                                                                                                                                                                                                                                                                                                                        GAAGTCTGACTTCAGCAGCCCACCCGCTGTGCACAAGCTGAGCAAGAGTCTCCCCCTGCG
                                                                                                                                                                                                                                                                                                                                                                  GAAGCCAGACTTCAGCAGCCAGCCGGCTGTGCACAAGCTGACCAAACGTATCCCCCTGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGAAAAGGAGATTACAGCTTCCCCAGACTACCTGGAGATAGCCATTTACTGCATAGGGGT 1427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCTGGATGTTGTGGAGCGATCGCCTCACCGGCCCATCCTCCAAGCCGGACTGCCGGCAAA 1067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCCCCTGGGAGAAGGTTGCTTTGGGCAAGTGGTCATGGCGGAAGCAGTGGGAATTGACAA 1787
                                                                                        GTATGAACTTCCAGAGGACCCAAAATGGGAGTTTCCAAGAGATAAGCTGACACTGGGCAA 1727
                                                                                                                                                                                  GAGGATAACAACACGCCTCTCTAACGGCAGACACCCCCATGCTGGCAGGGGTCTCCGA 1667
                                                                                                                                                                                                                                                CAGACAGGTAACAGTGTCTGCTGACTCCAGCTCTTCTATGAACTCCAACACTCCACTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                CTTCCTGATCACCTGCATGATTGGCACAATCATGGTGTGCCACATGAAGGGCAGAGGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TAATTCTACCGGGATCTCCTATCACACTGCATGGTTGACCGTTCTGCCAGATGAAGAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TAATTCTATTGGGATATCCTTTCACTCTGCATGGTTGACAGTTCTGCCAGCGCCTGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGTTCTCTATATTCGGAATGTAACTTTTGAGGACGCTGGGGAATATACGTGCTTGGCGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCTGCCCTACCTCAAGGTTCTCAAGGCCGCCGGTGTTAACACCCACGGACAAAGAGATTGA 1247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCCACATATCCAATGGATTCGACATTTTGAGCTGAATGGCAGTAAAATTGGACCTGACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCCCCACATCCAGTGGATCAAGCACGTGGAAAAGAACGGCAGTAAATACGGGCCCGACGG 1187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGGATGTTGTCGAGCGGTCACCCCACCGGCCAATACTCCAAGCTGGGCTTCCGGCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGGCTACAAGGTACGAAACCAGCACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AATGCCAACCATGCGGTGGCTGAAAAACGGGGAAGGAGTTTAAGCAGGAGCATCGCATTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCTCCATGCTGTGCCTGCGGCCAACACTGTCAAGTTTCGCTGCCCAGCCGGGGGGAACCC
                                                                GTATGAGCTGCCAGAGGACCCCAAGTGGGAGTATCCAAGGGAAAAGCTCACGCTGGGGAA
                                                                                                                                                        CCGGATCACCACTCGCCTGTCTTCCAACAATGACACCCACTTGCTGGCCGGGGTCTCCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTTCTTAATCGCCTGTATGGTGGTAACAGTCATCCTGTGCCGAATGAAGAACACGACCAA 1487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGAACTGGA-----TTCATCATCGGAGTATACGGAAATCGCCATCTACTGTGTGGGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGTCCTCTATGTGCGCAATGTCTCTTTTGAGGATGCTGGGGAGTATACGTGCTTGGCGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCATCCCTATCTGAAAGTGCTAAAGGCGGCCGGTGTTAACACCACGGACAAAGAGATCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGGCTTCAAGGTACGTAGTCAACACTTCAGCCTGATCATGGAGAGCGTGGTTCCCTCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TACGCCCTCCATGAGGTGGCTGAAGAACGGCAAGGAGTTCAAGCAGGAGCACCGCATTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGACAAC---AACCACATGAGGGCTCCGTACTGGACGAATACAGAAAAATTGGAAAAAGAA 548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGAGAACAGTAACAACAAGAGAGAGCACCATACTGGACCAACACAGAAAAAGATGGAAAAAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACTCCATGCTGTGCCCGCTGCCAACACTGTGAAGTTCCGCTGTCCAGCCGGTGGCAACCC
1442
                                                                                                                                                                                                                                                1382
                                                                                                                                                                                                                                                                                           1607
                                                                                                                                                                                                                                                                                                                                           1322
                                                                                                                                                                                                                                                                                                                                                                                     1547
                                                                                                                                                                                                                                                                                                                                                                                                                                1262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              827
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         767
```

```
당
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
      .. .. .. ..
                                      RESULT 8
US-08-471-570-3
                                                                                                                                                                                                                                                                                           δÃ
                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                             Ŷ
                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                              ş
                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                               Ŷ
                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                        В
                                                                                                                       γ
                                                                                                                                         В
                                                                                                                                                       δ
                                                                                                                                                                           В
                                                                                                                                                                                         Š
                                                                                                                                                                                                           밁
                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                            õ
                                                                                                                                                                                                                                                                             밁
                                                                         밁
                                                                                       δÔ
             Sequence 3, Application US/08471570 Patent No. 5750371 GENERAL INFORMATION:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                               1983
                                                                                                                                                                                                                                                                                                                                                                                1923
                                                                                                                                                                                                                                                                                                                                                                                                                                                  1803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1503
                                                                                                                                                                                                                                                                              2103
                                                                                                                                                                                                                                                                                             2328
                                                                                                                                                                                                                                                                                                                               2268
                                                                                                                                                                                                                                                                                                                                                                2208
                                                                                                                                                                                                                                                                                                                                                                                                                 1863
                                                                                                                                                                                                                                                                                                                                                                                                                                 2088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2028
                                                                         2463
                                                                                                                                                                                                                                                             2388
                                                                                                                                                                                                                                                                                                              2043
                                                                                                                                                                                                                                                                                                                                                                                                                                                 CGAACCATGCCTTCCTCAGTATCCACACATAAACGGCAGTGTTAAAAACATGA 2739
                                                                                                                                                                                                           GAATATCATAAATCTTCTTGGAGCCTGCACACAGGATGGGCCTCTCTATGTCATAGTTGA 1967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAAAGACCTTTCTGATCTGGTGTCAGAGATGGAGGTGATGAAGATGATTGGGAAACACAA 1907
                                                                                                        TACCAGGAGTTCCTGCTCTTCTGGGGATGACTCTGTCTTCTCCCCGGACGCAATGCCCTA
                                                                                                                  CACAAGAAGTTCTTGTTCTTCAGGAGATGATTCTGTTTTTTTCTCCAGACCCCATGCCTTA
                                                                                                                                         CAATGAGGAGTACCTGGACCTCAACAACCCTCTGGAGCAGTACTCGCCGAGCTATCCGGA
                                                                                                                                                  CAATGAGGAATACTTGGACCTCAGCCAACCTCTCGAACAGTATTCACCTAGTTACCCTGA
                                                                                                                                                                                                                                                                                      TGTCTGGTCCTTCGGGGTGTTAATGTGGGGAGATCTTCACTTTAGGGGGGCTCGCCCTACCC
                                                                                                                                                                                                                                                                                                              TGGACTCGCCAGAGATATCAACAATATAGACTATTACAAAAAGACCCACCAATGGGCGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAATATCATCAATCTTCTAGGAGCGTGCACCCAAGATGGCCCACTCTACGTGATAGTCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAAGGATCTTTCTGATCTGGTGTCTGAGATGGAAATGATGAAGATGATTGGGAAGCATAA
                                                                         CGACCCCTGTCTTCCCAAATCCCAACACACAAACGGCACCATTAAAACATGA
                                                                                                                                                                           GCAAAGACCCACTTTCAAGCAGCTTGTTGAGGATCTAGACCGAATCCTCACGCAAACGAC
                                                                                                                                                                                           CCAGAGACCAACGTTCAAGCAGTTGGTAGAAGACTTGGATCGAATTCTCACTCTCACAAC
                                                                                                                                                                                                                                                                              CGTCTGGTCTTTCGGTGTGCTTATGTGGGAGATCTTCACACTGGGGGGGTTCCCCCATACCC
                                                                                                                                                                                                                                                                                                                               TCCAGTCAAGTGGATGGCTCCAGAAGCCCTGTTTGATAGAGTATACACTCATCAGAGTGA
                                                                                                                                                                                                                                                                                                                                               GCCCCTGGGCGAAGGCTGCTTCGGGCAGGGTGGTGATGGCAGAGGCGGTGGGCCATCGACAA 1562
      IGARASHI, Koichi
                                                                        2514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1682
                                                                                                                          2687
                                                                                                                                                                                                                                                                                                                                                                2267
                                                                                                                                                                                                                                                                                                                                                                                1982
                                                                                                                                                                                                                                                                                                                                                                                                2207
                                                                                                                                                                                                                                                                                                                                                                                                                  1922
                                                                                                                                                                                                                                                                                                                                                                                                                                                  1862
                                                                                                                                                                           2342
                                                                                                                                                                                                            2282
                                                                                                                                                                                                                                                                                                               2102
                                                                                                                                                                                                                                                                                                                               2327
                                                                                                                                                                                                                                                                                                                                               2042
                                                                                                                                                                                                                                                                                                                                                                                                                                 2147
                                                                                                         2462
                                                                                                                                                          2627
                                                                                                                                                                                           2567
                                                                                                                                                                                                                             2507
                                                                                                                                                                                                                                             2222
                                                                                                                                                                                                                                                             2447
                                                                                                                                                                                                                                                                              2162
                                                                                                                                                                                                                                                                                             2387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                      밁
                                                     δÃ
                                                                       밁
                                                                                       Ş
                                                                                                        용
                                                                                                                        Q
                                                                                                                                         밁
                                                                                                                                                       Q
                                                                                                                                                                           밁
                                                                                                                                                                                          Š
```

```
; NAME/KEY:
; LOCATION:
US-08-471-570-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE:

APPLICATION NUMBER: US 07/743;

FILING DATE: 16-AUG-1991

ATTORNEY/AGENT INFORMATION:

NAME: LINEX, Ernest V

REGISTRATION NUMBER: 29822

REFERENCE/DOCKET NUMBER: 4089

TELEFONMUNICATION INFORMATION:

TELEPHONE: (617)523-3400

TELEFAX: (617)523-6440

TELEFAX: (617)523-6440

TELEFAX: 20291 STRE UR

INFORMATION FORRACTERISTICS:

LENGTH: 1603 base pairs

TYPE: NUMBER: 1910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/471,570
FILING DATE: 06-JUN-1995
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity Matches 1404; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: DAVID G. CONLIN; D. ADDRESSEE: CUSHMAN
STREET: 130 Water Street
CITY: Boston
STATE: Massachusetts
COUNTRY: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: SENOO, Massharu
APPLICANT: WATANABE, Tatsuya
TITLE OF INVENTION: PROTEIN,
NUMBER OF SEQUENCES: 18
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE: cDNA FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/149,664
                                  1028
 434
                                                                   374
                                                                                                  968
                                                                                                                                   314
                                                                                                                                                                    806
                                                                                                                                                                                                    254
                                                                                                                                                                                                                                     848
                                                                                                                                                                                                                                                                      194
                                                                                                                                                                                                                                                                                                     788
                                                                                                                                                                                                                                                                                                                                      728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: nucleic acid
STRANDEDNESS: doub
TOPOLOGY: linear
CGCCTCACCGGCCCATCCTCCAAGCCGGACTGCCGCAAATGCCTCCACAGTGGTCGGAG
                                                                                                                                                                                                  CCAACACTGTCAAGTTTCGCTGCCCAGCCGGGGGGAACCCAATGCCAACCATGCGGTGGC
                                                                                                                                                                                                                                                                                                                                                                     GAGCACCATACTGGACCAACACAGAAAAGATGGAAAAGCGGCTCCATGCTGTGCCTGCGG
                                                                                   TGGTGGAGAATGAATACGGGTCCATCAATCACACGTACCACCTGGATGTTGTGGAGCGAT 1027
                                                                                                                                   AGCACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCTGACAAGGGAAATTATACCTGTG
                                                                                                                                                     AGCACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCTGACAAGGGAAATTATACCTGTG
                                                                   TGGTGGAGAATGAATACGGGTCCATCAATCACACGTACCACCTGGATGTTGTGGAGCGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              02109
                                                                                                                                                                                                                                                                                                                                                                                                      30.9%;
ilarity 94.7%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CDS
25..1602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            07/743369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           40897
                                                                                                                                                                                                                                                                                                                                                                                                        ..
                                                                                                                                                                                                                                                                                                                                                                                                      Score 1318.8; DB 1;
Pred. No. 2.7e-314;
0; Mismatches 57;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DIKE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BRONSTEIN, ROBERTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  USE
                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                                                         1603;
                                                                                                                                                                                                                                                                                                                                                                                                        21;
                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                   433
                                                                                                                                                                                                                                                                                                                                      193
                                                                                                                                     373
                                                                                                                                                                    967
                                                                                                                                                                                                  313
                                                                                                                                                                                                                                      907
                                                                                                                                                                                                                                                                                                     847
                                                                                                                                                                                                                                                                                                                                                                       787
                                                                                                                                                                                                                                                                    253
```

ω

```
Š
                                                    몽
                                                                         Qy
                                                                                                     망
                                                                                                                         Ş
                                                                                                                                                      망
                                                                                                                                                                       ŗΩ
                                                                                                                                                                                                     밁
                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                           οy
                                                                                                                                                                                                                                                                                                       B
                                                                                                                                                                                                                                                                                                                           Õ
                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                              δÕ
                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                             Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δÃ
     1502
                                                                                                                              1979
                                                                                                                                                       1322
                                                                                                                                                                              1919
                                                                                                       1382
                                                                                                                                                                                                                                                                                                                               1739
                                                     1442
                                                                             2039
                                                                                                                                                                                                                             1859
                                                                                                                                                                                                                                                      1202
                                                                                                                                                                                                                                                                               1799
                                                                                                                                                                                                                                                                                                        1142
                                                                                                                                                                                                                                                                                                                                                        1082
                                                                                                                                                                                                                                                                                                                                                                                 1679
                                                                                                                                                                                                                                                                                                                                                                                                         1022
                                                                                                                                                                                                                                                                                                                                                                                                                                 1619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1088
                                                                                                                                                                                                       1262
                                                                                                                                                                                                                                                                                                                                                                                                                                                          964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGCTGGCCAGAGGCATGGAGTACTTGGCTTCCCAAAAATGTATTCATCGAGATTTAGCAG
                                                                                                                                                                                                 CACGCCTCTCTTCAACGGCAGACACCCCCATGCTGGCAGGGGTCTCCCGAGTATGAACTTC 1678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCAGCAGCCAGCCGGCTGTGCACAAGCTGACCAAACGTATCCCCCTGCGGAGACAGGTAA 1558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TAACTTTTGAGGACGCTGGGGAATATACGTGCTTGGCGGGTAATTCTATTGGGATATCCT 132
                                                                 ACATTAACCGTGTTCCTGAGGAGCAGATGACCTTCAAGGACTTGGTGTCATGCACCTACC
                                                                                                                AAGGCAACCTCCGAGAATACCTCCGAGCCCGGAGGCCACCCGGGATGGAGTACTCCTATG
                                                                                                                                                  ATCTTCTTGGAGCCTGCACACAGGATGGGCCTCTCTATGTCATAGTTGAGTATGCCTCTA 1978
                                                                                                                                                                                                                                                                                                                 AAGGTTGCTTTGGGCAAGTGGTCATGGCGGAAGCAGTGGGAATTGACAAAGACAAGCCCCA 1798
                                                                                                                                                                                                                                                                                                                                                      CAGAGGACCCAAAATGGGAGTTTCCAAGAGATAAGCTGACACTGGGCAAGCCCCTGGGAG
                                                                                                                                                                                                                                                                                                                                                                 CAGAGGACCCAAAATGGGAGTTTCCAAGAGATAAGCTGACACTGGGCAAGCCCCTGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                      CACGCCTCTCTTCAACGGCAGACACCCCCATGCTGGCAGGGGTCTCCGAGTATGAACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                      --GTTTCGGCTGAGTCCAGCTCCTCCATGAACTCCAACACCCCGCTGGTGAGGATAACAA 1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAGTTTCGGCTGAGTCCAGCTCCTCCATGAACTCCAACACCCCGCTGGTGAGGATAACAA 1618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTACAGCTTCCCCAGACTACCTGGAGATAGCCATTTACTGCATAGGGGTCTTCTTAATCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTACAGCTTCCCCAGACTACCTGGAGATAGCCATTTACTGCATAGGGGTCTTCTTAATCG 1438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTCACTCTGCATGGCTTGACAGTTCTGCC------AGCGCCTGGAAGAGAAAAGGAGA 1378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGACCGAGGCGGATGCTGGGGAATATATATGTAAGGTCTCCAATTATATAGGGCCAGGCCA 727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCAAGCACTCGGGGATAAATAGTTCCAATGCAGAAGTGCTGGCTCTGT-----TCAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCAAGGCCGCCGGTGTTAACACCACGGACAAAGAGATTGAGGTTCTCTATATTCGGAATG 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGCACGTGGAAAAGAACGGCAGTAAATACGGGCCCGACGGGCTGCCCTACCTCAAGGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCACGTGGAAAAGAACGGCAGTAAATACGGGCCCGACGGGCTGCCCTACCTCAAGGTTC 1207
                                                  ACATTAACCGTGTTCCTGAGGAGCAGATGACCTTCAAGGACTTGGTGTCATGCACCTACC
                                                                                                   AAGGCAACCTCCGAGAATACCTCCGAGCCCGGAGGCCACCCGGGATGGAGTACTCCTATG
                                                                                                                                                                                                                                                                                                    AAGGTTGCTTTGGGCAAGTGGTCATGGCGGAAGCAGTGGGAATTGACAAAGACAAGCCCA 1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCAGTCTGCCTGGCTCACTGTCCTGCCAAAACAGCAAGCGCCTGGAAGAGAAAAAGGAGA 787
  1561
                                                 1501
                                                                          2098
                                                                                                   1441
                                                                                                                          2038
                                                                                                                                                   1381
                                                                                                                                                                                                                                                                                                                                                      1141
                                                                                                                                                                                                                                                                                                                                                                                                     1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          613
```

```
TOPULAGE:
MOLECULE TYPE: cDNA
HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: NO. 5750365ophthalmus viridescens
DEVELOPMENTAL STAGE: Adult
TISSUE TYPE: Regenerating forelimb blastema
CELL TYPE: Mesenchyme and Epithelium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-070-165F-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 9, Application US/08070165F Patent No. 5750365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: (614)-293-5631
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
LENGTH: 2681 base pairs
                                                                                                                                                                                                                                                                                                IMMEDIATE SOURCE:
LIBRARY: lambda gi
CLONE: Kp19-1
POSTTION IN GENOME:
UNITS: bp
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STREET: S2052 Davis M.
STREET: 9th Avenue
CITY: Columbus
STATE: Ohio
                                                                                                                                                                                     LOCATION:
FEATURE:
NAME/KEY:
                                                                                                                                                                                                                                      LOCATION:
FEATURE:
NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
CLASSIFICATION: 435
TELECOMMUNICATION INFORMATION:
TELEPHONE: (614)-293-8093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/070,165F
                                                                        PUBLICATION INFORMATION:
AUTHORS: Poulin, Matthew L
AUTHORS: Chiu, Ing-Ming
TITLE: Nucleotide sequences of two newt
TITLE: (No. 5750365ophthalmus viridescens) fibroblast growth
TITLE: factor receptor-2 variants
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Chiu, Ing-Ming
APPLICANT: Poulin, Matthew L
TITLE OF INVENTION: Acidic Fibroblast Growth Factor (aFGF)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2159 CCAGAAATGTTTTGGTAACAGAAAACAATGTGATGAAAATAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES:
                JOURNAL: BI
VOLUME: 122
PAGES: 209-
DATE: 1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY: U.ZIP: 43210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRANDEDNESS:
TOPOLOGY: lir
                                                                                                                                                                         LOCATION:
 RELEVANT RESIDUES
                                                                                                                                                                                                                                                                                     NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         nucleic acid
                                                                                                                                                                                                                                                                                                                                                KP19-1
                               209-211
                                            Biochim. Biophys. Acta
1220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               USA
                                                                                                                                                                                                                      CDS
325..2517
                                                                                                                                                                                                                                                                    5'UTR
1..324
                                                                                                                                                                         3'UTR
2518..2681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         double
 Ä
SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chiu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Medical Research Center, 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9:
IJ
S.
9:
FROM 1 TO 2681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            West
```

```
망
                   ş
                                        В
                                                                Š
                                                                                            망
                                                                                                                 ş
                                                                                                                                      밁
                                                                                                                                                              δ
                                                                                                                                                                                       DЬ
                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                         Š
                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                              Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δÔ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-070-165F-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 1607; Conserva
1383
                        1602
                                              1323
                                                                     1542
                                                                                             1263
                                                                                                                    1482
                                                                                                                                           1203
                                                                                                                                                                  1422
                                                                                                                                                                                          1143
                                                                                                                                                                                                                1368
                                                                                                                                                                                                                                        1083
                                                                                                                                                                                                                                                               1308
                                                                                                                                                                                                                                                                                       1023
                                                                                                                                                                                                                                                                                                             1248
                                                                                                                                                                                                                                                                                                                                                          1188
                                                                                                                                                                                                                                                                                                                                                                                                       1128
                                                                                                                                                                                                                                                                                                                                                                                                                                                      1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1008
                                                                                                                                                                                                                                                                                                                                    969
                                                                                                                                                                                                                                                                                                                                                                                  909
                                                                                                                                                                                                                                                                                                                                                                                                                              849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              648 AGATGCCATCTCATCCGGAGATGATGAGGATGACACCGATGGTGCGGAAGATTTTGTCAG 707
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         708
                                                                                                                                                                                                                                    TAATTCTATTGGGATATCCTTTCACTCTGCATGGTTGACAGTTCTGCCAGCGCCTGGAAG 1367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCTGGTGAGGATAACAACACGCCTCTCTTCAACGGCAGACACCCCCCATGCTGGCAGGGGT 1661
                                                                                                        GACCAAGAAGCCAGACTTCAGCAGCCAGCCGGCTGTGCACAAGCTGACCAAACGTATCCC
                                                                                                                                                       AGGGGTCTTCTTAATCGCCTGTATGGTGATGAACAGTCATCCTGTGCCGAATGAAGAACAC 1481
                                                                                                                                                                                                    ----- AGAAAAGGAGATTACAGCTTCCCCAGACTACCTGGAGATAGCCATTTACTGCAT
                                                                                                                                                                                                                                                                                                  GGTTCTCTATATICGGAATGTAACTTTTGAGGACGCTGGGGAATATACGTGCTTGGCGGG 1307
                                                                                                                                                                                                                                                                                                                                                                                                                              TGCCTCCACAGTGGTCGGAGGAGACGTAGAGTTTGTCTGCAAGGTTTACAGTGATGCCCA 1127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCTGGATGTTGTGGAGCGATCGCCTCACCGGCCATCCTCCAAGCCGGACTGCCGGCAAA 1067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGGCTACAAGGTACGAAACCAGCACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGAGAACAGTAACAACAAGAGAGCACCATACTGGACCAACACAGAAAAAGATGGAAAAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGATGCAAACTCATCAGGGGATGATGAAGACGACGACGGCTCGGAAGATTTCACAAA 491
ACTGGTCCGGATCACCACTCGCCTGTCTTCCAACAATGACACCCACTTGCTGGCCGGGGT
                                                           CCTGCGGAGACAGGTAACAGTTTCGGCTGAGTCCAGCTCCTCCATGAACTCCAACACCCC
                                                                                                                                           GGGAGGCTTCCTGATCACCTGCATGATTGGCACAATCATGGTGTGCCACATGAAGGGCAG
                                                                                                                                                                                       AGATGAAGAACGGGAACTGGATTCATCATCGGAGTATACGGGAAATCGCCATCTACTGTGT
                                                                                                                                                                                                                                                                                                                                               GCTGCCCTACCTCAAGGTTCTCAAGGCCGCCGGTGTTAACACCCACGGACAAAGAGATTGA 1247
                                                                                                                                                                                                                                                                                                                                                                                                       GCCCCACATCCAGTGGATCAAGCACGTGGAAAAGAACGGCAGTAAATACGGGCCCGACGG 1187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGACAAC - - - AACCACATGAGGGCTCCGTACTGGACGAATACAGAAAAATTGGAAAAAGAA 548
                                             CCTGCGCAGACAGGTAACAGTGTCTGCTGACTCCAGCTCTTCTATGAACTCCAACACTCC
                                                                                            AGGCAAGAAGTCTGACTTCAGCAGCCCACCCGCTGTGCACAAGCTGAGCAAGAGTCTCCC
                                                                                                                                                                                                                                                                                     AGTTCTGACCCTGCATAACGTGACTGAGGCGGACCGGGGCCAGTACACATGCAAAGTCTC
                                                                                                                                                                                                                                                                                                                                                                                 GCCACATATCCAATGGATTCGACATTTTGAGCTGAATGGCAGTAAAATTGGACCTGACGG
                                                                                                                                                                                                                                                                                                                                  GCATCCCTATCTGAAAGTGCTAAAGCGCTCTGGAATTAATAGCTC-----CAATGCCGA 1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 1276.4; DB 1; Length Pred. No. 8.6e-304; O; Mismatches 476; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2681;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
1442
                                             1382
                                                                                            1322
                                                                                                                  1541
                                                                                                                                          1262
                                                                                                                                                                                       1202
                                                                                                                                                                                                               1421
                                                                                                                                                                                                                                      1142
                                                                                                                                                                                                                                                                                     1082
                                                                                                                                                                                                                                                                                                                                                                                                                              908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3;
```

2682 GCCTTACGAACCATGCCTTCCTCAGTATCCACACATAAACGGCAGTGTTAAAACATGA 2739 	Оу
2622 CCCTGACACAAGAAGTTCTTGTTCTTCAGGAGATGATTGTGTTTTTTTCTCCAGACCCCAT 2681	Оу
2562 CACAACCAATGAGGAATACTTGGACCTCAGCCAACCTCTGGAACAGTATTCACCTAGTTA 2621	Db Qy
2502 GCCCTCCCAGAGACCAACGTTCAAGCAGTTGGTAGAAGACTTGGATCGAATTCTCACTCT 2561 	Db dy
2442 TAAGCCAGCCAACTGCACCAACGAACTGTACATGATGATGAGGGACTGTTGGCATGCAGT 2501	Qу
2382 CTACCCAGGGATTCCCGTGGAGGAGCTTTTTAAGCTGCTGAAGGAAG	Оy
2322 GAGTGATGTCTGGGTCTTCGGGGTGTTAATGTGGGAGATCTTCACTTTAAGGGGGCCTCGCC 2381	Db dy
2262 GCGGCTTCCAGTCAAGTGGATGGCTCCAGAAGCCCTGTTTGATAGAGTATACACTCATCA 2321	Qy db
2202 AGACTITGGACTCGCCAGAGATATCAACAATATAGACTATTACAAAAAGACCACCAATGG 2261 	Оу
2142 TCATCGAGATITAGCAGCCAGAAATGTTTTGGTAACAGAAAACAATGTGATGAAAATAGC 2201 	Фр
2082 GGTGTCATGCACCTACCAGCTGGCCAGAGGCATGGAGTACTTGGCTTCCCAAAAATGTAT 2141 	Ду
2022 GATGGAGTACTCCTATGACATTAACCGTGTTCCTGAGGAGCAGATGACCTTCAAGGACTT 2081	Оy
1962 AGTTGAGTATGCCTCTAAAGGCAACCTCCGAGAATACCTCCGAGCCCGGAGGCCACCCGG 2021 	Qy Db
1902 ACACAAGAATATCATAAATCTTCTTGGAGCCTGCACACAGGATGGGCCTCTCTATGTCAT 1961 	Qy Db
1842 CACAGAGAAAGACCTTTCTGATCTGGTGTCAGAGATGGAGATGATGAAGATGATTGGGAA 1901 	Оу рь
1782 TGACAAAGACAAGCCCAAGGAGGCGGTCACCGTGGCCGTGAAGATGTTGAAAGATGATGC 1841 	da Vo
1722 GGCCAAGCCCCTGGGAGAAGGTTGCTTTGGGCAAGTGGGTATGGCGAAGCAGTGGGAAT 1781 	Qy Db
1662 CTCCGAGTATGAACTTCCAGAGGACCCAAAATGGGAGTTTCCAAGAGATAAGCTGACACT 1721 	Qy Db

Conservative

0

Mismatches

476;

Indels

15;

Gaps

ω

```
; RELEVANT RESIDUES US-08-885-418-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-885-418-9
                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION: 435
TELECOMMUNICATION INFORMATION:
TELEPHONE: (614)-293-8093
TELEPAX: (614)-293-5631
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 9, Application US/08885418 Patent No. 5925528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
APPLICANT: Chiu, Ing-Ming
APPLICANT: Poulin, Matthew L
TITLE OF INVENTION: Acidic Fibroblast Growth
NUMBER OF SEQUENCES: 12
                                                                                                                                                                                                    NAME/KEY:
LOCATION:
FEATURE:
NAME/KEY:
                                                                                                                                                                                                                                                        POSITION UNITS:
                                                                                                                                                                                                                                                                                                 TISSUE TYPE: RECELL TYPE: MESSIMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PAtentin Release #1.0, Version
CURRENT APPLICATION DATA:
                                                                                                                       PUBLICATION INFORMATION:
AUTHORS: Poulin, Matthew L
AUTHORS: Chiu, Ing-Ming
                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: CI
HYPOTHETICAL: NO
ANTI-SENSE: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
                                                                                                                                                                                 FEATURE:
                                                                                                                                                                                                                                                 FEATURE:
                                                                                                                                                                                                                                                                                                                                                       ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE: Ing-Ming C
STREET: $2052 Davis N
STREET: 9th Avenue
CITY: Columbus
STATE: Ohio
COUNTRY: USA
                                                                                                                                                                                                                                                                             LIBRARY:
CLONE: F
                                                                                  TITLE: Nucleotide sequences of two newt
TITLE: (No. 5925280phthalmus viridescens) fibroblast growth
TITLE: factor receptor 2 variants
JOURNAL: Biochim. Biophys. Acta
                                                                                                                                                          NAME/KEY: 3'UTR
LOCATION: 2518..2681
                                                                                                                                                                                                                                                                                                                               ORGANISM: No. 5925528ophthalmus viridescens
                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: nucleic
STRANDEDNESS:
                                                     PAGES: 209-211
DATE: 1994
                                                                                                                                                                                           LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 2681 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             43210
                                                                                                                                                                                                                                                                     IN GENOME:
                                                                                                                                                                                                                                                                            r: lambda gt11
KP19-1
                                                                                                                                                                                          CDS
325..2517
                                                                                                                                                                                                                         5'UTR
1..324
                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                              Mesenchyme and
                                                                                                                                                                                                                                                                                                                        Regenerating
                                                                                                                                                                                                                                                                                                                                                                                      CDNA
                                                                                                                                                                                                                                                                                                                                                                                                          double
                                          Ħ
29.9%;
76.6%;
                                          SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Chiu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Medical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US/08/885,418
                                          Ħ
Score
Pred.
                                                                                                                                                                                                                                                                                                              Epithelium
                                                                                                                                                                                                                                                                                                                        forelimb
                                          NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Research Center,
1276.4;
No. 8.66
                                          9
                                                                                                                                                                                                                                                                                                                        blastema
                                          FROM
8.6e-304;
                                          ш
         DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       #1.25
                                          TO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Factor (aFGF)
       2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              480 West
         Length
밁
                δ
                                      ₽
                                                         δõ
                                                                                 망
                                                                                                  Ş
                                                                                                                           밁
                                                                                                                                              δÃ
                                                                                                                                                                    ₽
                                                                                                                                                                                       Ş
                                                                                                                                                                                                             망
                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                           õ
                                                                                                                                                                                                                                                                                                망
                                                                                                                                                                                                                                                                                                                    Q
                                                                                                                                                                                                                                                                                                                                           멍
                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches 1607;
1443
                  1662
                                                                                                      1542
                                                                                                                                                                                                             1143
                                                                                                                                                                                                                                                       1083
                                                                                                                                                                                                                                                                            1308
                                                                                                                                                                                                                                                                                                 1023
                                                                                                                                                                                                                                                                                                                                                                1188
                                                                                                                                                                                                                                                                                                                                                                                                        1128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1008
                                                                                                                                                                                                                                                                                                                                           969
                                                                                                                                                                                                                                                                                                                                                                                     909
                                                                                                                                                                                                                                                                                                                                                                                                                             849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                432
```

```
ACTGGTCCGGATCACCACTCGCCTGTCTTCCAACAATGACACCCACTTGCTGGCCGGGGT
                                                                                                                                                                                  GACCAAGAAGCCAGACTTCAGCAGCCAGCCGGCTGTGCACAAGCTGACCAAACGTATCCC 1541
                                                                                                                                                                                                                                                                                                                                                                                                         AGGGGTCTTCTTAATCGCCTGTATGGTGGTAACAGTCATCCTGTGCCGAATGAAGAACAC 1481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TAATTCTATTGGGATATCCTTTCACTCTGCATGGTTGACAGTTCTGCCAGCGCCTGGAAG 1367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGCCTCCACAGTGGTCGGAGAGAGGTAGAGTTTGTCTGCAAGGTTTACAGTGATGCCCA 1127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCTGGATGTTGTGGAGCGATCGCCTCACCGGCCCATCCTCCAAGCCGGACTGCCGGCAAA 1067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGGCTACAAGGTACGAAACCAGCACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGACAAC---AACCACATGAGGGCTCCGTACTGGACGAATACAGAAAAATTGGAAAAAGAA 548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGATGCAAACTCATCAGGGGATGATGAAGACGACAACGACGACGCTCGGAAGATTTCACAAA
                                                                                                                GCTGGTGAGGATAACAACACGCCTCTCTTCAACGGCAGACACCCCCCATGCTGGCAGGGGT
                                                                                                                                                                                                                                                                                                                                                                            GGGAGGCTTCCTGATCACCTGCATGATTGGCACAATCATGGTGTGCCACATGAAGGGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ----- AGAAAAGGAGATTACAGCTTCCCCAGACTACCTGGAGATAGCCATTTACTGCAT 1421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGTTCTCTATATTCGGAATGTAACTTTTTGAGGACGCTGGGGAATATACGTGCTTGGCGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCTGCCCTACCTCAAGGTTCTCAAGGCCGCCGGTGTTAACACCCACGGACAAAGAGATTGA 1247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCCACATATCCAATGGATTCGACATTTTGAGCTGAATGGCAGTAAAATTGGACCTGACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCCCCACATCCAGTGGATCAAGCACGTGGAAAAGAACGGCAGTAAATACGGGCCCGACGG 1187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CACAACCACAAAGTTGGGGGGGGATGCAGAGTTTGTTTGCAAAGTCTACAGTGACGCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CGGCTTCAAGGTACGTAGTCAACACTTCAGCCTGATCATGGAGAGCGTGGTTCCCTCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TACGCCCTCCATGAGGTGGCTGAAGAACGGCAAGGAGTTCAAGCAGGAGCACCGCATTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AATGCCAACCATGCGGTGGCTGAAAAACGGGAAGGAGTTTAAAGCAGGAGCATCGCATTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACTCCATGCTGTGCCCGCTGCCAACACTGTGAAGTTCCGCTGTCCAGCCGGTGGCAACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCTCCATGCTGTGCGGCCAACACTGTCAAGTTTCGCTGCCCAGCCGGGGGGAACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGAGAACAGTAACAAGAGAGCACCATACTGGACCAACACAGAAAAGATGGAAAAGCG
                                                                                                                                                                                                                                                                               AGGCAAGAAGTCTGACTTCAGCAGCCCACCCGCTGTGCACAAGCTGAGCAAGAGTCTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGATGAAGAACGGGAACTGGATTCATCGGAGTATACGGAAATCGCCATCTACTGTGT 1202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGTTCTGACCCTGCATAACGTGACTGAGGCGGACCGGGGCCAGTACACATGCAAAGTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCATCCCTATCTGAAAGTGCTAAAGCGCTCTGGAATTAATAGCTC-----CAATGCCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCTGGATGTTGTCGAGCGGTCACCCCACCGGCCAATACTCCAAGCTGGGCTTCCGGCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGATGCCATCTCATCCGGAGATGATGAGGATGACACCGATGGTGCGGAAGATTTTGTCAG
                                                                                          1442
                                                                                                                                        1661
                                                                                                                                                                                                                                   1601
                                                                                                                                                                                                                                                                                                                                                                            1262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1082
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  491
                                                                                                                                                                                       1382
                                                                                                                                                                                                                                                                                 1322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      827
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 767
```

```
Ş
                                                                                                                                                 Š
                                                                                                                                                                                                                     망
                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                           р
                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     망
 밁
                  Ŷ
                                           밁
                                                                                    рь
                                                                                                         õ
                                                                                                                                 В
                                                                                                                                                                            В
                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                              õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ŷ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 рь
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
 2463
                                           2403
                                                                                        2343
                                                                                                                                                                                                                       2163
                                                                                                                                                                                                                                                                2103
                                                                                                                                                                                                                                                                                                                                                                                                                                           1863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1722
                                                                 2622
                                                                                                                                  2283
                                                                                                                                                       2502
                                                                                                                                                                             2223
                                                                                                                                                                                       2442 TAAGCCAGCCAACTGCACCAACGAACTGTACATGATGAGGGGGGGCTGTTGGCATGCAGT 2501
                                                                                                                                                                                                                                            2382
                                                                                                                                                                                                                                                                                      2322
                                                                                                                                                                                                                                                                                                            2043
                                                                                                                                                                                                                                                                                                                                  2262
                                                                                                                                                                                                                                                                                                                                                        1983
                                                                                                                                                                                                                                                                                                                                                                           2202
                                                                                                                                                                                                                                                                                                                                                                                                 1923
                                                                                                                                                                                                                                                                                                                                                                                                                       2142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2082
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1842 CACAGAGAAAAGACCTTTCTGATCTGGTGTCAGAAGATGAAGAATGATGAAGATGAATGGAA 1901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CACAACCAATGAGGAATACTTGGACCTCAGCCAACCTCTCGAACAGTATTCACCTAGTTA 2621
                                                                                                                                             GCCCTCCCAGAGACCAACGTTCAAGCAGTTGGTAGAAGACTTGGATCGAATTCTCACTCT 2561
                                                                                                                                                                                                                                                               GCGGCTTCCAGTCAAGTGGATGGCTCCAGAAGCCCTGTTTGATAGAGTATACACTCATCA 2321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGACAAAGAAGCCCCAAGGAGGCGGTCACCGTGGCCGTGAAGATGTTGAAAGATGATGC 1841
GCCTTACGAACCATGCCTTCCTCAGTATCCACACATAAACGGCAGTGTTAAAACATGA 2739
                                                                                                                                                                            CAAGCCTGGCAACTGCACCAATGAGCTGTATACAATGATGACGGACTGCTGGCGTGCTGT
                                                                                                                                                                                                                                AGACTTTGGACTCGCCAGAGATATCAACAATATAGACTATTACAAAAAAGACCACCAATGG 2261
                                                                                                                                                                                                                                                                                                                                                                                                            TCATCGAGATTTAGCAGCCAGAAATGTTTTGGTAACAGAAAACAATGTGATGAAAATAGC 2201
                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGTGTCATGCACCTACCAGCTGGCCAGAGGCATGGAGTACTTGGCTTCCCAAAAATGTAT 2141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGACAAGGACCGGCCCAAAGATGCAGCGACCGTGGCAGTGAAGATGCTGAAAGACGATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGGCAAGCCCCTGGGAGAAGGTTGCTTTGGGCAAGTGGTCATGGCGGAAGCAGTGGGAAT
                                                                                      AACGACCAATGAGGAGTACCTGGACCTCAACAACCCTCTGGAGCAGTACTCGCCGAGCTA 2402
                                                                                                                                                                                                                      CCATCGGGACTTGGCAGCTCGGAATGTCTTGGTGACGGAAACCAACGTCATGAAAATTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                          AGTGTCTTGCACGTACCAACTGGCCAGGGGAATGGAGTACCTGGCATCACAGAAGTGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGTTGAGTATGCCTCTAAAGGCAACCTCCGAGAATACCTCCGAGCCCGGAGGCCACCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AACCGAGAAGGATCTTTCTGATCTGGTGTCTGAGATGGAAATGATGAAGATGATTGGGAA
                                                                                                                                 GCCCTCGCAAAGACCCACTTTCAAGCAGCTTGTTGAGGATCTAGACCGAATCCTCACGCA 2342
                                                                                                                                                                                                                                                                                                                                                     2520
                                                                                                                                                                                                                      2222
                                                                                                                                                                                                                                                                                                           . 2102
                                                                                                                                                                                                                                                                                                                                                                                                 1982
                                                                                                                                                                                                                                                                                                                                                                                                                                          1922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1622
                                                                                                                                                                            2282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1802
                                                                                                                                                                                                                                                                                                                                                     2042
```

RESULT 11 US-07-997-133-2 ; Sequence 2, Application US/07997133

```
SEQUENCE CHARACTERISTICS:
LENGTH: 2469 base pairs
TYPE: nucleic acid
STRANDEDNESS: unknown
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic
US-07-997-133-2
                               Ş
                                                                            Вþ
                                                                                                              õ
                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                            õ
                                                                                                                                                                                                                                                                                                                     Вþ
                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; Patent No. 5288855
; GENERAL INFORMATION:
APPLICANT: Bergonzoni, Laura
APPLICANT: ,Mazue, Guy
APPLICANT: Isacchi, Antonella
APPLICANT: Roncucci, Romeo
APPLICANT: Sarmientos, Paolo
                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPOTTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIA Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/997,133
FILING DATE: 28-DEC-1992
CLASSIFICATION DATA:
APPLICATION NUMBER: US/07/642,755
FILING DATE: 18-JAN-1991
ATTORNEY/AGENT INFORMATION:
NAME: ODION, NO. 5288855man F.
REGISTRATION NUMBER: 24,618
DEFENCE OCCUPET NUMBER: 24,618
DEFENCE OCCUPET NUMBER: 24,618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 1616; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER: 76
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703)521-4500
TELEFAX: (703)486-2347
TELEFAX: 248855 OPAT UR
INFORMATION FOR SEQ ID NO: 2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: Extracellular Form of the Human TITLE OF INVENTION: Fibroblast Growth Factor Receptor NUMBER OF SEQUENCES: 8 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                             518
                                                                                                                                                                                                                                                                                                                                                                                                                           458 GCCTGTTGAAAGATGCCGCCGTGATCAGTTGGACTAAGGATGGGGTGCACTTGGGGCCCA 517
467
                                     743
                                                                                                                                                                                                                                           287
                                                                                                                                                                                                                                                                                                                          227
                                                                                                                                                                                                                                                                                                                                                                                                     167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, ADDRESSEE: P.C.
STREET: 1755 Jefferson Davis Highway, CITY: Arlington
STATE: Virginia
ZIP: 22202
                                                                                                                                                                                                                                                                                                                                            ACAATAGGACAGTGCTTATTGGGGAGTACTTGCAGATAAAGGGCGCCCACGCCTAGAGACT 577
CATCCCCAGAAAAGATGGAAAAGAAATTGCATGCAGTGCCGGCTGCCAAGACAGTGAAGT
                                   CCAACACAGAAAAGATGGAAAAGCGGCTCCATGCTGTGCCTGCGGCCAACACTGTCAAGT
                                                                            CAGAGGAGAAAGAAACAGATAACACCAAACCAAACCGTATGCCCGTAGCTCCATATTGGA
                                                                                                                                                                                               TGAATGTCACAGATGCCATCTCATCCGGAGATGATGAGGATGACACCGATGGTGCGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                     GGCTGCGGGACGATGTGCAGAGCATCAACTGGCTGCGGGACGGGGTGCAGCTGGCGGAAA 226
                                                                                                                                                         CCGGCCTCTATGCTTGCGTAACCAGCAGCCCCCTCGGGCAGTGACACCACCTACTTCTCCG
                                                                                                                                                                                                                                                           CCGGCCTCTATGCTTGTACTGCCAGTAGGACTGTAGACAGTGAAACTTGGTACTTCATGG
                                                                                                                                                                                                                                                                                                                   ATTTTGTCAGTGAGAACAGTAACAACAA....-GAGAGCACCATACTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27.78;
71.18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 1182.2; DB 1
Pred. No. 1.1e-280;
0; Mismatches 633;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Fourth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MAIER & NEUSTADT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2469;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                    742
                                       802
                                                                            466
                                                                                                                                                            406
                                                                                                                                                                                                                                                                                637
                                                                                                                                                                                                   697
                                                                                                                                                                                                                                         346
```

w

```
g
                                                                            οy
                                                                                                            δõ
                                                                                                                              밁
                                                                                                                                                                                                                                          Ş
                δÃ
                                             Qy
                                                               밁
                                                                                              В
                                                                                                                                          Q
                                                                                                                                                            밁
                                                                                                                                                                          δõ
                                                                                                                                                                                            밁
                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                            무
                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                         В
   밁
                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                       δõ
                                                                                                                                                                                                                                                                                                                                                                                      무
                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                   Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ₽
   1541
                  1823
                                  1481
                                                 1763
                                                                 1421
                                                                                1703
                                                                                               1361
                                                                                                              1643
                                                                                                                                                                                             1187
                                                                                                                                                                                                                             1127
                                                                                                                                                                                                                                                                           1343
                                                                                                                              1307
                                                                                                                                              1583
                                                                                                                                                             1247
                                                                                                                                                                             1523
                                                                                                                                                                                                            1463
                                                                                                                                                                                                                                            1403
                                                                                                                                                                                                                                                            1067
                                                                                                                                                                                                                                                                                           1007
                                                                                                                                                                                                                                                                                                                                         1223
                                                                                                                                                                                                                                                                                                           1283
                                                                                                                                                                                                                                                                                                                                                                         1163
                                                                                                                                                                                                                                                                                                                                                                                                        1103
                                                                                                                                                                                                                                                                                                                                                                                                                                      1043
                                                                                                                                                                                                                                                                                                                                                                                       827
                                                                                                                                                                                                                                                                                                                          947
                                                                                                                                                                                                                                                                                                                                                         887
                                                                                                                                                                                                                                                                                                                                                                                                                        767
                                                                                                                                                                                                                                                                                                                                                                                                                                                       707
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      647
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    527
                                                                                                                                                          AGCTGACCAAACGTATCCCCCTGCGGAGACAGGTAACAGTTTCGGCTGAGTCCAGCTCCT
TGGCGGAAGCAGTGGGAATTGACAAAGACAAGCCCAAGGAGGCGGTCACCGTGGCCGTGA
                                                             TGGCAGAGGCTATCGGCCTGGACAAGGACAAACCCCAACCGTGTGACCAAAGTGGCTGTGA
                                                                                                      CCCCCATGCTGGCAGGGGTCTCCCGAGTATGAACTTCCAGAGGACCCAAAATGGGAGTTTC
                                                                                                                            CCATGAACTCTGGGGTTCTTGGGTTCGGCCATCACGGCTC----TCCTCCAGTGGGA
                                                                                                                                     CCATGAACTCCAACACCCCGCTGGTGAGGATAACAACACGCCTCTCTTCAACGGCAGACA
                                                                                                                                                                                         TCTACAAGATGAAGAGTGGTACCAAGAAGAGTGACTTCCACAGCCAGATGGCTGTGCACA
                                                                                                                                                                                                                                                        TGACCGTTCTGGAAGCCCTGGAAGAGAGGCCGGCAGTGATGACCTCGCCCCCTGTACCTGG
                                                                                                                                                                                                                                                                   TGACAGTTCTGCCAGCGCCTGGAAGAGAAAAGGGAGATTACAGCTTCCCCAGACTACCTGG
                                                                                                                                                                                                                                                                                                 CTGGGGAATATACGTGCTTGGCGGTAATTCTATTGGGATATCCTTTCACTCTGCATGGT
                                                                                                                                                                                                                                                                                                                                 TTAACACCACGACAAAGAGATTGAGGTTCTCTATATTCGGAATGTAACTTTTGAGGACG
                                                                                                                                                                                                                                                                                                                                                                                               TCTGCAAGGTTTACAGTGATGCCCAGCCCCACATCCAGTGGATCAAGCACGTGGAAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                    TCCTGCAAGCAGGGTTGCCCGCCAACAAAACAGTGGCCCTGGGTAGCAACGTGGAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                   TCCTCCAAGCCGGACTGCCGGCAAATGCCTCCACAGTGGTCGGAGGAGACGTAGAGTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTCCCATGCTAGCAGGGGTCTCTGAGTATGAGCTTCCCGAAGACCCTCGCTGGGAGCTGC
                                                                                                                                                                                                                                                                                         CAGGGGAGTATACGTGCTTGGCGGGTAACTCTATCGGACTCTCCCATCACTCTGCATGGT
                                                                                                                                                                                                                                                                                                                       TTAATACCACCGACAAAGAGATGGAGGTGCTTCACTTAAGAAATGTCTCCTTTGAGGACG
                                                                                                                                                                                                                                                                                                                                                                                      TAATGGACTCTGTGGTGCCCTCTGACAAGGGCAACTACACCTGCATTGTGGAGAATGAGT
                                                                                                                                                                                                         1522
                                                                                                                                                                                                                                                                                                                                                                                                     1162
1600
               1882
                                                                                              1420
                                                                                                             1702
                                                                                                                                            1642
                                                                                                                                                                          1582
                                                                                                                                                                                          1246
                                                                                                                                                                                                                                         1462
                                                                                                                                                                                                                                                                                                                                                                                      886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1042
                                               1822
                                                               1480
                                                                                                                             1360
                                                                                                                                                            1306
                                                                                                                                                                                                                          1186
                                                                                                                                                                                                                                                          1126
                                                                                                                                                                                                                                                                         1402
                                                                                                                                                                                                                                                                                         1066
                                                                                                                                                                                                                                                                                                        1342
                                                                                                                                                                                                                                                                                                                        1006
                                                                                                                                                                                                                                                                                                                                       1282
                                                                                                                                                                                                                                                                                                                                                       946
                                                                                                                                                                                                                                                                                                                                                                      1222
                                                                                                                                                                                                                                                                                                                                                                                                                                     1102
                                                                                                                                                                                                                                                                                                                                                                                                                                                     766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    706
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   862
```

RESULT 12 US-08-459-296-1

Sequence 1, Application US/08459296 Patent No. 5670323

GENERAL INFORMATION:
APPLICANT: No. 5670323a, Michael
APPLICANT: Gonzalez, Ana-Maria
APPLICANT: Baird, Andrew
TITLE OF INVENTION: PROCESS FOR DE'
TITLE OF INVENTION: DISEASE
INMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americ

DETECTION

õ

NEOPLASTIC

STREET: CITY: N STATE:

New York

Americas

```
δÃ
                                                                                                                                                                                                                                                                       δÃ
                                                                                                                                                                                                                                                                                                                       õ
  밁
                       δÃ
                                                밁
                                                                    Ş
                                                                                              밁
                                                                                                                      δÃ
                                                                                                                                                 밁
                                                                                                                                                                      δÃ
                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                        δõ
                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                        δã
                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
 2381
                        2660
                                                 2321
                                                                                              2261
                                                                                                                                                  2201
                                                                                                                                                                          2483
                                                                                                                                                                                                  2141
                                                                                                                                                                                                                          2423
                                                                                                                                                                                                                                                  2081
                                                                                                                                                                                                                                                                        2363
                                                                                                                                                                                                                                                                                                  2021
                                                                                                                                                                                                                                                                                                                                                    1961
                                                                                                                                                                                                                                                                                                                                                                                                    1901
                                                                                                                                                                                                                                                                                                                                                                                                                           2183
                                                                                                                                                                                                                                                                                                                                                                                                                                                  1841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1661
                                                                                                                                            GGGACTGTTGGCATGCAGTGCCCTCCCAGAGACCAACGTTCAAGCAGTTGGTAGAAGACT
CTGTTTTTTCTCCAGACCCCATGCCTTACGAACCATGCCTTCCTCAGTATCCA
                                                                                                                                                                                                          ACCAGTACTCCCCCAGCTTTCCCGACACCCGGAGCTCTACGTGCTCCTCAGGGGAGGATT
                                                          AACAGTATTCACCCTAGTTACCCTGACACAAGAAGTTCT----TGTTCTTCAGGAGATGATT
                                                                                             TGGACCGCATCGTGGCCTTGACCTCCAACCAGGAGTACCTGGACCTGTCCATGCCCCTGG
                                                                                                                    TGGATCGAATTCTCACTCTCACAACCAATGAGGAATACTTGGACCTCAGCCAACCTCTCG
                                                                                                                                                                                              AGGAGGGTCACCGCATGGACAAGCCCAGTAACTGCACCAACGAGCTGTACATGATGATGATGC
                                                                                                                                                                                                                                                TCACTCTGGGCGGCTCCCCATACCCCGGTGTGCCTGTGGAGGAACTTTTCAAGCTGCTGA
                                                                                                                                                                                                                                                             TCACTTTAGGGGGCTCGCCCTACCCAGGGATTCCCGTGGAGGAACTTTTTAAGCTGCTGA
                                                                                                                                                                                                                                                                                                          ATAGAGTATACACTCATCAGAGTGATGTCTGGTCCTTCGGGGTGTTAATGTGGGAGATCT
                                                                                                                                                                                                                                                                                                                                                                                              ACAATGTGATGAAAATAGCAGACTTTGGACTCGCCAGAGATATCAACAATATAGACTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                TGGCCTCCAAGAAGTGCATACACCGAGACCTGGCAGCCAGGAATGTCCTGGTGACAGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGGCTTCCCAAAAATGTATTCATCGAGATTTAGCAGCCAGAAATGTTTTGGTAACAGAAA 2182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAGCCCGGAGGCCACCCGGGATGGAGTACTCCTATGACATTAACCGTGTTCCTGAGGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGATGAAGATGAGTTGGGAAACACAAGAATATCATAAATCTTCTTGGAGCCTGCACACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGCTCTCCTCCAAGGACCTGGTGTCCTGCGCCTACCAGGTGGCCCGAGGCATGGAGTATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGATGACCTTCAAGGACTTGGTGTCATGCACCTACCAGCTGGCCAGAGGCATGGAGTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATGGGCCTCTATGTCATAGTTGAGTATGCCTCTAAAGGCAACCTCCGAGAATACCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGATGAAGATGATCGGGAAGCATAAGAATATCATCAACCTGCTGGGGGCCTGCACGCAGG
                                                                                                                                                                                                                                                                                                ACCGGATCTACACCCACCAGAGTGATGTGTGTCTTTCGGGGTGCTCCTGTGGGAGATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGGCCCGGAGGCCCCCAGGGCTGGAATACTGCTACAACCCCAGCCACAACCCCAGAGGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATGGTCCCTTGTATGTCATCGTGGAGTATGCCTCCAAGGGCAACCTGCGGGAGTACCTGC
2433
                       2712
                                                                                                                                                                                                                       2482
                                                                                                                                                                                                                                                                       2422
                                                                                                                                                                                                                                                                                                                                                                                                 1960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1720
                                                                      2659
                                                                                              2320
                                                                                                                      2602
                                                                                                                                                                      2542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1780
                                                                                                                                                                                                2200
                                                                                                                                                                                                                                                2140
                                                                                                                                                                                                                                                                                                2080
                                                                                                                                                                                                                                                                                                                       2362
                                                                                                                                                                                                                                                                                                                                                2020
                                                                                                                                                                                                                                                                                                                                                                       2302
                                                                                                                                                                                                                                                                                                                                                                                                                        2242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1660
                                                                                                                                              2260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1942
```

```
ş
                                                                                                DЬ
                                                                                                                            ş
                                                                                                                                                            밁
                                                                                                                                                                                          Š
                                                                                                                                                                                                                           망
                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                       Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: Coding Sequence;
LOCATION: 1..2466
CTHER INFORMATION:
US-08-459-296-1
Š
                               ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches 1616;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 2469 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM COmpatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ Version 2.0
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
ANAME: Misrock, S. Leslie
REGISTRATION UNMBER: 18,872
REFERENCE/DOCKET NUMBER: 7573
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-790-9090
TELEFAX: 212-869-8864
TELEFX: 66141 PENNIE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  518
 983
                                 647
                                                                                                                                                               527
                                                                                                                                                                                                                              467
                                                                                                                                                                                                                                                            743
                                                                                                                                                                                                                                                                                          407
                                                                                                                                                                                                                                                                                                                                                         347
                                                                                                                                                                                                                                                                                                                                                                                         638
                                                                                                                                                                                                                                                                                                                                                                                                                        287
                                                                                                                                                                                                                                                                                                                                                                                                                                                      578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/0 FILING DATE: 02-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACAATAGGACAGTGCTTATTGGGGAGTACTTGCAGATAAAGGGGCGCCACGCCTAGAGACT 577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCCTGTTGAAAGATGCCGCCGTGATCAGTTGGACTAAGGATGGGGTGCACTTGGGGCCCA 517
                                                 TTCGCTGCCCAGCCGGGGGAACCCAATGCCAACCATGCGGTGGCTGAAAAACGGGAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                       CCGGCCTCTATGCTTACCAGTAACCAGCAGCACCTCGGGCAGTGACACCACCTACTTCTCCG
ACGGGTCCATCAATCACACGTACCACCTGGATGTTGTGGAGCGATCGCCTCACCGGCCCA 1042
                               TAATGGACTCTGTGGTGCCCTCTGACAAGGGCAACTACACCTGCATTGTGGAGAATGAGT
                                                                                             AATTCAAACCTGACCACAGAATTGGAGGCTACAAGGTCCGTTATGCCACCTGGAGCATCA
                                                                                                             AGTTTAAGCAGGAGCATCGCATTGGAGGCTACAAGGTACGAAACCAGCACTGGAGCCTCA
                                                                                                                                                               TCAAATGCCCTTCCAGTGGGACCCCAAACCCCACACTGCGCTGGTTGAAAAATGGCAAAG
                                                                                                                                                                                                                           CATCCCCAGAAAAGATGGAAAAGAAATTGCATGCAGTGCCGGCTGCCAAGACAGTGAAGT
                                                                                                                                                                                                                                          CAGAGGAGAAAGAAACAGATAACACCAAACCGTATGCCCGTAGCTCCATATTGGA
                                                                                                                                                                                                                                                                                                                        ATTTTGTCAGTGAGAACAGTAACAACAA-------GAGAGCACCATACTGGA 742
                                                                                                                                                                                                                                                                                                                                                         TCAATGTTTCAGATGCTCTCCCCCTCCGGAGGATGATGATGATGATGACTCCTCTT 406
                                                                                                                                                                                                                                                                                                                                                                                     TGAATGTCACAGATGCCATCTCATCCGGAGATGATGAGGATGACACCGATGGTGCGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCGGCCTCTATGCTTGTACTGCCAGTAGGACTGTAGACAGTGAAACTTGGTACTTCATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCAACCGCACCCGCATCACAGGGGAGGAGGTGGAGGTGCAGGACTCCGTGCCCGCAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGCTGCGGGACGATGTGCAGAGCATCAACTGGCTGCGGGACGGGGTGCAGCTGGCGGAAA 226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10036/2711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                27.78;
71.18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US/08/459,296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7573-024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 1182.2; DB 1
Pred. No. 1.1e-280;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches 633;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2469;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                          802
                                                                                                                                                                                                                                                                                          466
                                                                                                                                                                                                                                                                                                                                                                                                                                                      637
                               706
                                                                                                646
                                                                                                                               922
                                                                                                                                                             586
                                                                                                                                                                                               862
                                                                                                                                                                                                                             526
                                                                                                                                                                                                                                                                                                                                                                                       697
                                                                                                                                                                                                                                                                                                                                                                                                                       346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ω
••
```

```
Ş
                                              밁
                                                                        õ
                                                                                                         밁
                                                                                                                                 Ş
                                                                                                                                                                   8
                                                                                                                                                                                              Ş
                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                       õ
                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                  Š
                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                            ρ
                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                     Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       рь
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           당
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1403
                                                                                                                                                                                                                                                                                                                                                  1421
                                                                                                                                                                                                                                                                                                                                                                              1703
                                                                                                                                                                                                                                                                                                                                                                                                           1361
                                                                                                                                                                                                                                                                                                                                                                                                                                         1643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1583
                 2063
                                                                                                                                                                   1601
                                                                                                                                                                                                 1883
                                                                                                                                                                                                                              1541
                                                                                                                                                                                                                                                                                       1481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       707
AGATGACCTTCAAGGACTTGGTGTCATGCACCTACCAGCTGGCCAGAGGCATGGAGTACT
                                                                                                                                                                                                                           CAAGAGATAAGCTGACACTGGGCAAGCCCCTGGGAGAAGGTTGCTTTGGGCAAGTGGTCA 1762
                                                                                                                                                                                                                                                                                                                                                                                                                        CCCCCATGCTGGCAGGGGTCTCCGAGTATGAACTTCCAGAGGACCCAAAATGGGAGTTTC 1702
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGACAGTTCTGCCAGCGCCTGGAAGAGAAAAGGAGATTACAGCTTCCCCAGACTACCTGG 1402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGGGGAATATACGTGCTTGGCGGTAATTCTATTGGGATATCCTTTCACTCTGCATGGT 1342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTAACACCACGGACAAAGAGATTGAGGTTCTCTATATTCGGAATGTAACTTTTTGAGGACG 1282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCTGCAAGGTTTACAGTGATGCCCAGCCCCACATCCAGTGGATCAAGCACGTGGAAAAGA 1162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACGGCAGCATCAACCACACATACCAGCTGGATGTCGTGGAGCGGTCCCCTCACCGGCCCA
                                              AGGCCGGAGGCCCCAGGGCTGGAATACTGCTACAACCCAGAGCCACAACCCAGAGGAGG
                                                                                                       ATGGTCCCTTGTATGTCATCGTGGAGTATGCCTCCAAGGGCAACCTGCGGGAGTACCTGC
                                                                                                                                                                  TGGCGGAAGCAGTGGGAATTGACAAAGACAAGCCCAAGGAGGCGGTCACCGTGGCCGTGA 1822
                                                                                                                                                                                                                                                                                                                                                                                                           CTCCCATGCTAGCAGGGGTCTCTGAGTATGAGCTTCCCGAAGACCCTCGCTGGGAGCTGC 1420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCATGAACTCCAACACCCCGCTGGTGAGGATAACAACACGCCTCTCTTCAACGGCAGACA 1642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAGGGGAGTATACGTGCTTGGCGGGTAACTCTATCGGACTCTCCCATCACTCTGCATGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACGGCAGTAAATACGGGCCCGACGGGCTGCCCTACCTCAAGGTTCTCAAGGCCGCCGCTG 1222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCTGCAAGCAGGGTTGCCCGCCAACAAAACAGTGGCCCCTGGGTAGCAACGTGGAGTTCA 826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCTCCAAGCCGGACTGCCGGCAAATGCCTCCACAGTGGTCGGAGGAGACGTAGAGTTTG 1102
                                                                        GAGCCCGGAGGCCACCCGGGATGGAGTACTCCTATGACATTAACCGTGTTCCTGAGGAGC
                                                                                                                                    ATGGGCCTCTCTATGTCATAGTTGAGTATGCCTCTAAAGGCAACCTCCGAGAATACCTCC
                                                                                                                                                                                                 TGATGAAGATGATTGGGAAACACAAGAATATCATAAATCTTCTTGGAGCCTGCACACAGG
                                                                                                                                                                                                                                                                                      TGGCAGAGGCTATCGGGCTGGACAAGGACAAACCCAACCGTGTGACCAAAGTGGCTGTGA
                                                                                                                                                                                                                                                                                                                                                  CTCGGGACAGACTGGTCTTAGGCAAACCCCTGGGAGAGGGCTGCTTTGGGGCAGGTGGTGT 1480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCATGAACTCTGGGGTTCTTCTGGTTCGGCCATCACGGCTC----TCCTCCAGTGGGA 1360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGACCGTTCTGGAAGCCCTGGAAGAGAGGCCGGCAGTGATGACCTCGCCCCTGTACCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTAATACCACCGACAAAGAGATGGAGGTGCTTCACTTAAGAAATGTCTCCTTTGAGGACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATGGGAGCAAGATTGGCCCAGACAACCTGCCTTATGTCCAGATCTTGAAGACTGCTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGTGTAAGGTGTACAGTGACCCGCAGCCGCACATCCAGTGGCTAAAGCACATCGAGGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    886
                                              1780
                                                                           2062
                                                                                                         1720
                                                                                                                                    2002
                                                                                                                                                                                                 1942
                                                                                                                                                                                                                                                                                       1540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1006
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         946
                                                                                                                                                                   1660
                  2122
```

```
RESULT 13
US-07-997-133-2
                                                                                                                                                                                                                                                                                                                                                                                      Sequence 2, Applicatio
GENERAL INFORMATION:
APPLICANT: Bergonz,
APPLICANT: Mazue,
APPLICANT: Isacchi
                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Flopy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1781
   APPLICATION NUMBER: US/0: FILING DATE: 28-DEC-1992 CLASSIFICATION: 530 PRIOR APPLICATION DATA: APPLICATION NUMBER: US/0:
                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: Extracellular Form of the TITLE OF INVENTION: Fibroblast Growth Factor NUMBER OF SEQUENCES: 8
                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2543
                                                                                     CURRENT APPLICATION DATA:
                                                                                                                                                                                     ADDRESSEE: 1
ADDRESSEE: 1755
STREET: 1751
CITY: Arling
STATE: Virg
ZIP: 22202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCACTTTAGGGGGCTCGCCCTACCCCAGGGATTCCCGTGGAGGAACTTTTTAAGCTGCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGTTTTTTCTCCAGACCCCATGCCTTACGAACCATGCCTTCCTCAGTATCCA 2712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AACAGTATTCACCTAGTTACCCTGACACAAGAAGTTCT---TGTTCTTCAGGAGATGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGGATCGAATTCTCACTCTCACAACCAATGAGGAATACTTGGACCTCAGCCAACCTCTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGGAGGGTCACCGCATGGACAAGCCCAGTAACTGCACCAACGAGCTGTACATGATGATGATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCGGATCTACACCCACCAGAGTGATGTGTGTGGTCTTTCGGGGTGCTCCTGTGGGAGATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACAATGTGATGAAAATAGCAGACTTTGGACTCGCCAGAGATATCAACAATATAGACTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGGCTTCCCAAAAATGTATTCATCGAGATTTAGCAGCCAGAAATGTTTTGGTAACAGAAA 2182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGGAAGGACACAGAATGGATAAGCCAGCCAACTGCACCAACGAACTGTACATGATGATGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATAGAGTATACACTCATCAGAGTGATGTCTGGTCCTTCGGGGGTGTTAATGTGGGAGATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACAATGTGATGAAGATAGCAGACTTTGGCCTCGCACGGGACATTCACCACCACCTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGGCCTCCAAGAAGTGCATACACCGAGACCTGGCAGCCAGGAATGTCCTGGTGACAGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCAGTACTCCCCCAGCTTTCCCGACACCCGGAGCTCTACGTGCTCCTCAGGGGAGGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGGACCGCATCGTGGCCTTGACCTCCAACCAGGAGTACCTGGACCTGTCCATGCCCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCTCTCCTCCAAGGACCTGGTGTCCTGCGCCTACCAGGTGGCCGGAGGCATGGAGTATC
                                                                                                                                                                                                                      Arlington
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Application US/07997133
                                                                                                                                                                                                   Virginia
                                                                                                                                                                                                                                      E: P.C.
1755 Jefferson Davis
                                                                                                                                                                                                                                                                                                                                                      Isacchi, Antonella
Roncucci, Romeo
Sarmientos, Paolo
                                                                                                                                                                                                                                                                                                                                                                                                         Mazue, Guy
                                                                                                                                                                                                                                                                                                                                                                                                                       Bergonzoni, Laura
                                                                                                                                                                                                                                                                      OBLON, SPIVAK, MCCLELLAND,
                                                                                                                                                                                                                                                                                                                                        Extracellular Form of the Human
                                                                     US/07/997,133
     US/07/642,755
                                                                                                                                                                                                                                   Highway,
                                                                                                                                                                                                                                                                      MAIER & NEUSTADT
                                                                                                       #1.25
                                                                                                                                                                                                                                                                                                                       Receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1840
                               Ş
                                                                                                Š
                                                                                                                                    밁
                                                                                                                                                                Ş
                                                                                                                                                                                                  Вb
                                                                                                                                                                                                                                   δõ
                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                      멍
                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Вр
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; STRANDEDNESS: unknown
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-07-997-133-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELECOMMUNICATION INFORMATION:
TELEPHONE: (703)521-4500
TELEFAX: (703)486-2347
TELEFX: 248855 OPAT UR
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 27.7%;
Best Local Similarity 71.1%;
Matches 1616; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 18-JAN-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          287
                                                                                                                                    767
                                                                                                                                                                                                   707
                                                                                                                                                                                                                                                                    647
                                                                                                                                                                                                                                                                                                     923
                                                                                                                                                                                                                                                                                                                                      587
                                                                                                                                                                                                                                                                                                                                                                                                         527
                                                                                                                                                                                                                                                                                                                                                                                                                                      803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            458 GCCTGTTGAAAGATGCCGCCGTGATCAGTTGGACTAAGGATGGGGTGCACTTGGGGCCCA 517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER: 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 2469 base pairs
                 ACGGCAGTAAATACGGGCCCGACGGGCTGCCCTACCTCAAGGTTCTCAAGGCCGCCGCCGCTG 1222
                                                                                                                                                  TCCTCCAAGCCGGACTGCCGGCAAATGCCTCCACAGTGGTCGGAGGAGACGTAGAGTTTG
                                                                                                                                                                                                                                                                TGAATGTCACAGATGCCATCTCATCCGGAGATGATGAGGATGACACCGATGGTGCGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCAACCGCACCGCATCACAGGGGAGGAGGAGGTGCAGGACTCCGTGCCCGCAGACT
                                                                                  TCTGCAAGGTTTACAGTGATGCCCAGCCCCACATCCAGTGGATCAAGCACGTGGAAAAGA 1162
                                                                                                                                                                                                  ACGGCAGCATCAACCACACATACCAGCTGGATGTCGTGGAGCGGTCCCCTCACCGGCCCA
                                                                                                                                                                                                                                                                                                                                     AATTCAAACCTGACCACAGAATTGGAGGCTACAAGGTCCGTTATGCCACCTGGAGCATCA
                                                                                                                                                                                                                                                                                                                                                                                                                       TTCGCTGCCCAGCCGGGGGAACCCAATGCCAACCATGCGGTGGCTGAAAAACGGGAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCAACACAGAAAAGATGGAAAAGCGGCTCCATGCTGTGCCTGCGGCCAACACTGTCAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGAGGAGAAAGAAACAGATAACACCAAACCGTATGCCCGTAGCTCCATATTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACAATAGGACAGTGCTTATTGGGGAGTACTTGCAGATAAAGGGCGCCACGCCTAGAGACT 577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGCTGCGGGACGATGTGCAGAGCATCAACTGGCTGCGGGACGGGGTGCAGCTGGCGGAAA
ATGGGAGCAAGATTGGCCCAGACAACCTGCCTTATGTCCAGATCTTGAAGACTGCTGGAG
                                                                                                                               TCCTGCAAGCAGGGTTGCCCGCCAACAAAACAGTGGCCCTGGGTAGCAACGTGGAGTTCA 826
                                                                                                                                                                                                                                   ACGGGTCCATCAATCACACGTACCACCTGGATGTTGTGGAGCGATCGCCTCACCGGCCCA 1042
                                                                                                                                                                                                                                                                                                                                                                  AGTTTAAGCAGGAGCATCGCATTGGAGGCTACAAGGTACGAAACCAGCACTGGAGCCTCA
                                                                                                                                                                                                                                                                                                                                                                                                       TCAAATGCCCTTCCAGTGGGACCCCAAACCCCACACTGCGCTGGTTGAAAAATGGCAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CATCCCCAGAAAAGATGGAAAAGAAATTGCATGCAGTGCCGGCTGCCAAGACAGTGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTTTGTCAGTGAGAACAGTAACAACAA-------GAGAGCACCATACTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCAATGTTTCAGATGCTCCCCCCTCCTCGGAGGATGATGATGATGATGACTCCTCTT
                                                                  TGTGTAAGGTGTACAGTGACCCGCAGCCGCACATCCAGTGGCTAAAGCACATCGAGGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     769-226-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 1182.2; DB 5
Pred. No. 1.1e-280;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches 633;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        742
                                                                886
                                                                                                                                                                                                  766
                                                                                                                                                                                                                                                                                                  982
                                                                                                                                                                                                                                                                                                                                      646
                                                                                                                                                                                                                                                                                                                                                                    922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             226
                                                                                                                                                                                                                                                                                                                                                                                                     586
                                                                                                                                                                                                                                                                                                                                                                                                                                      862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          346
```

Ş

Ş 8 οy

밁 Ŷ 밁 Ş 밁 Ŷ

В

Ъ Ş

ω

δ

밁

Ş

밁

Ş

밁

밁

```
믕
                     9
                                             DЬ
                                                                  Ş
                                                                                              밁
                                                                                                                 Ş
                                                                                                                                               Вþ
                                                                                                                                                                    Ş
                                                                                                                                                                                                В
                                                                                                                                                                                                                   Š
                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                              망
                                                                                                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                                             망
                                                                                                                                                                                                                                                                                                                                                                                                                  õ
                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           당
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Š
                                                                                                                                                 1781
                                                                                                                                                                                                                                                                                                                                                                      1823
                                                                                                                                                                                                                                                                                                                                                                                             1481
                                                                                                                                                                                                                                                                                                                                                                                                                     1763
                                                                                                                                                                                                                                                                                                                                                                                                                                              1421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1007
 1961
                        2243
                                                                       2183
                                                                                                1841
                                                                                                                       2123
                                                                                                                                                                       2063
                                                                                                                                                                                                1721
                                                                                                                                                                                                                        2003
                                                                                                                                                                                                                                                1661
                                                                                                                                                                                                                                                                       1943
                                                                                                                                                                                                                                                                                               1601
                                                                                                                                                                                                                                                                                                                      1883
                                                                                                                                                                                                                                                                                                                                              1541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        947
                                                                                            GAGCCCGGAGGCCACCCGGGATGGAGTACTCCTATGACATTAACCGTGTTCCTGAGGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTCCCATGCTAGCAGGGTCTCTGAGTATGAGCTTCCCGAAGACCCTCGCTGGGAGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTAACACCACGGACAAAGAGATTGAGGTTCTCTATATTCGGAATGTAACTTTTGAGGACG
ATAAAAAGACAACCAACGGCCGACTGCCTGTGAAGTGGATGGCACCCGAGGCATTATTTG
           ACAAAAAGACCACCAATGGGCGGCTTCCAGTCAAGTGGATGGCTCCAGAAGCCCCTGTTTG
                                                                                                                                              AGCTCTCCTCCAAGGACCTGGTGTCCTGCGCCTACCAGGTGGCCCGAGGCATGGAGTATC
                                                                                                                                                                                                                                                         ATGGGCCTCTATGTCATAGTTGAGTATGCCTCTAAAGGCAACCTCCGAGAATACCTCC
                                                                                                                                                                                                                                                                                                         TGATGAAGATGAGTTGGGAAACACAAGAATATCATAAATCTTCTTGGAGCCTGCACACAGG
                                                                                                                                                                                                                                                                                                                                                        AGATGTTGAAAGATGATGCCACAGAGAAAGACCTTTCTGATCTGGTGTCAGAGATGGAGA
                                                                                                                                                                                                                                                                                                                                                                                           TGGCAGAGGCTATCGGGCTGGACAAGGACAAACCCCAACCGTGTGACCAAAGTGGCTGTGA
                                                                                                                                                                                                                                                                                                                                                                                                           TGGCGGAAGCAGTGGGAATTGACAAAGACAAGCCCAAGGAGGCGGTCACCCTGGCCGTGA 1822
                                                                                                                                                                                                                                                                                                                                                                                                                                           CTCGGGACAGACTGGTCTTAGGCAAACCCCTGGGAGAGGGGCTGCTTTGGGCAGGTGGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAAGAGATAAGCTGACACTGGGCAAGCCCCTGGGAGAAGGTTGCTTTGGGCAAGTGGTCA 1762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCCCCATGCTGGCAGGGGTCTCCGAGTATGAACTTCCAGAGGACCCAAAATGGGAGTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCATGAACTCTGGGGTTCTTCTGGTTCGGCCATCACGGCTC-----TCCTCCAGTGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCATGAACTCCAACACCCCGCTGGTGAGGATAACAACACGCCTCTCTTCAACGGCAGACA 1642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGCTGACCAAACGTATCCCCCTGCGGAGACAGGTAACAGTTTCGGCTGAGTCCAGCTCCT 1582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGATAGCCATTTACTGCATAGGGGTCTTCTTAATCGCCTGTATGGTGGTAACAGTCATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGACAGTTCTGCCAGCGCTGGAAGAGAAAAGGAGATTACAGCTTCCCCAGACTACCTGG
                                                                                                                                                                     AGATGACCTTCAAGGACTTGGTGTCATGCACCTACCAGCTGGCCAGAGGCATGGAGTACT
                                                                                                                                                                                              AGGCCCGGAGGCCCCAGGCCTGGAATACTGCTACAACCCCAGCCACAACCCAGAGGAGC
                                                                                                                                                                                                                                             ATGGTCCCTTGTATGTCATCGTGGAGTATGCCTCCAAGGGCAACCTGCGGGAGTACCTGC
                                                                                                                                                                                                                                                                                             TGATGAAGATGATCGGGAAGCATAAGAATATCATCAACCTGCTGGGGGCCCTGCACGCAGG
                                                                                                                                                                                                                                                                                                                                            AGATGTTGAAGTCGGACGCAACAGAGAAAGACTTGTCAGACCTGATCTCAGAAATGGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGCTGGCCAAGAGCATCCCTCTGCGCAGACAGGTAACAGTGTCTGCTGACTCCAGTGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCTACAAGATGAAGAGTGGTACCAAGAAGAGTGACTTCCACAGCCAGATGGCTGTGCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGACCGTTCTGGAAGCCCTGGAAGAGAGGCCGGCAGTGATGACCTCGCCCCTGTACCTGG
                                                                     2242
                                                                                              1900
                                                                                                                      2182
                                                                                                                                               1840
                                                                                                                                                                      2122
                                                                                                                                                                                                                    2062
                                                                                                                                                                                                                                                                                             1660
                                                                                                                                                                                                                                                                                                                   1942
                                                                                                                                                                                                                                                                                                                                             1600
                                                                                                                                                                                                                                                                                                                                                                    1882
                                                                                                                                                                                                                                                                                                                                                                                           1540
                                                                                                                                                                                                                                                                                                                                                                                                                                           1480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1702
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1342
                     2302
                                                                                                                                                                                                                                             1720
                                                                                                                                                                                                                                                                      2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1282
```

```
RESULT 14
US-08-451-822A-14
                                                                                          Š
                                                                                                                         밁
                                                                                                                                                 ρy
                                                                                                                                                                                     В
                                                                                                                                                                                                                οy
                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                          Q
                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                        Q
                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                               2141
                                                                                                                                                                                                                                                  2201
                                                                                                                                                                                                                                                                                 2483
                                                                                                                                                                                                                                                                                                                                           2423
                                                                2381
                                                                                                                                                       2603
                                                                                                                                                                                      2261
                                                                                                                                                                                                                     2543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2303
                                                             TGGATCGAATTCTCACTCTCACAACCAATGAGGAATACTTGGACCTCAGCCAACCTCTCG
                                                                               CTGTTTTTTCTCCAGACCCCATGCCTTACGAACCATGCCTTCCTCAGTATCCA
                                                                                                                                       AACAGTATTCACCCTAGTTACCCTGACACAAGAAGTTCT---TGTTCTTCAGGAGATGATT
                                                                                                                                                                                                                                                                GGGACTGTTGGCATGCAGTGCCCTCCCAGAGACCAACGTTCAAGCAGTTGGTAGAAGACT
                                                                                                                                                                                                                                                                                                                              AGGAAGGACACAGAATGGATAAGCCAGCCAACTGCACCAACGAACTGTACATGATGATGA 2482
                                                                                                                                                                                                                                                                                                                                                                                          TCACTTTAGGGGGCTCGCCCTACCCAGGGATTCCCGTGGAGGAACTTTTTTAAGCTGCTGA 2422
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATAGAGTATACACTCATCAGAGTGATGTCTGGTCCTTCGGGGTGTTAATGTGGGAGATCT
                                                                                                                       ACCAGTACTCCCCAGCTTTCCCGACACCCGGAGCTCTACGTGCTCCTCAGGGGAGGATT
                                                                                                                                                                                                                                                  GGGACTGCTGGCATGCAGTGCCCTCACAGAGACCCCACCTTCAAGCAGCTGGTGGAAGACC
                                                                                                                                                                                                                                                                                                            AGGAGGGTCACCGCATGGACAAGCCCAGTAACTGCACCAACGAGCTGTACATGATGC
                                                                                                                                                                                                                                                                                                                                                                          TCACTCTGGGCGGCTCCCCATACCCCGGTGTGCCTGTGGAGGAACTTTTCAAGCTGCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCGGATCTACACCCACCAGAGTGATGTGTGGTCTTTCGGGGTGCTCCTGTGGGAGATCT
                                                             2433
                                                                                          2712
                                                                                                                                                      2659
                                                                                                                                                                                                                   2602
                                                                                                                                                                                                                                                                             2542
                                                                                                                                                                                                                                                                                                            2200
                                                                                                                                                                                                                                                                                                                                                                        2140
                                                                                                                                                                                     2320
```

```
Sequence 14, Application US/08451822A
Patent NO. 5863888

APPLICANT: Dionne, Craig A
APPLICANT: Crumley, Greg
APPLICANT: Crumley, Greg
APPLICANT: Salessinger, Joseph
TITLE OF INVENTION: Fibroblast Growth Factor Receptors
NUMBER OF SEQUENCES: 19
CORRESPONDENCE ADDRESS: 19
COUNTRY: USA
ZIP: 19426
COUNTRY: USA
ZIP: 19426
COMPUTER TRADABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: 1BM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTMARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION NUMBER: US/08/451,822A
FILING DATE: 26-MAY-1995
CLASSIFICATION NUMBER: US/08/451,822A
FILING DATE: 14-OCT-1994
PRIOR APPLICATION NUMBER: US 08/323,430
FILING DATE: 14-OCT-1994
PRIOR APPLICATION NUMBER: US 07/934,372
FILING DATE: 14-OCT-1994
PRIOR APPLICATION NUMBER: US 07/934,372
FILING DATE: 19-00-7549,587
FILING DATE: 19-00-7549,587
FILING DATE: 19-00-7549,587
FILING DATE: 19-00-7549,587
FILING DATE: 06-JUL-1990
ATTORNEY/AGENT INFORMATION:
REGISTRATION NUMBER: US 07/549,587
FILING DATE: 06-JUL-1990
ATTORNEY/AGENT INFORMATION:
TELEPHONE: (610) 454-3816
TELEPHONE: (610) 454-3816
TELEPAX: (610) 454-3808
INFORMATION FOR SEO ID NO: 14:
```

```
Q
      á
                               밁
                                                 Q
                                                                              밁
                                                                                                Qy
                                                                                                                          Ъ
                                                                                                                                                                             В
                                                                                                                                                                                               Ş
                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                              멍
                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                 ρ
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               망
                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ρ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-08-451-822A-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Simi
Matches 1621;
       1343
                               1094
                                                                              1034
                                                                                                      1223
                                                                                                                                                     1163
                                                                                                                                                                                                        1103
                                                                                                                                                                                                                                                       1043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
LENGTH: 2662 base pair
                                                                                                                               974
                                                                                                                                                                              914
                                                                                                                                                                                                                               854
                                                                                                                                                                                                                                                                                                        983
                                                                                                                                                                                                                                                                               794
                                                                                                                                                                                                                                                                                                                                734
                                                                                                                                                                                                                                                                                                                                                       923
                                                                                                                                                                                                                                                                                                                                                                                674
                                                                                                                                                                                                                                                                                                                                                                                                        863
                                                                                                                                                                                                                                                                                                                                                                                                                                 614
                                                                                                                                                                                                                                                                                                                                                                                                                                                       803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 2662 base pai
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                          THATACCACCGACAAAGAGTGGAGGTGCTTCACTTAAGAAATGTCTCCTTTGAGGACG
                                                                                         TTAACACCACGGACAAAGAGATTGAGGTTCTCTATATTCGGAATGTAACTTTTGAGGACG
                                                                                                                                                                                          TCTGCAAGGTTTACAGTGATGCCCAGCCCCACATCCAGTGGATCAAGCACGTGGAAAAGA 1162
                                                                                                                                                                                                                                          TCCTCCAAGCCGGACTGCCGGCAAATGCCCTCCACAGTGGTCGGAGGAGACGTAGAGTTTG
                                                                                                                                                                                                                                                                         ATTTTGTCAGTGAGAACAGTAACAACAA-------GAGAGCACCATACTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCCTGTTGAAAGATGCCGCCGTGATCAGTTGGACTAAGGATGGGGTGCACTTGGGGCCCCA
  TGACAGTTCTGCCAGCGCCTGGAAGAGAAAAGGAGATTACAGCTTCCCCAGACTACCTGG
                                                                                                                                       ACGGCAGTAAATACGGGCCCGACGGGCTGCCCTAACGTTCTCAAGGTCCAAGGCCGCCGGTG
                                                                                                                                                                                                                           TCCTGCAAGCAGGGTTGCCCGCCAACAAAACAGTGGCCCTGGGTAGCAACGTGGAGTTCA
                                                                                                                                                                                                                                                                                                                                                                            AATTCAAACCTGACCACAGAATTGGAGGCTACAAGGTCCGTTATGCCACCTGGAGCATCA
                                                                                                                                                                                                                                                                                                                                                                                       AGTTTAAGCAGGAGCATCGCATTGGAGGCTACAAGGTACGAAACCAGCACTGGAGCCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CATCCCCAGAAAGATGGAAAAGAAATTGCATGCAGTGCCGGCTGCCAAGACAGTGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCAACACAGAAAAGATGGAAAAGCGGCTCCATGCTGTGCCTGCGGCCAACACTGTCAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGAGGAGAAAGAAACAGATAACACCAAAACCAAACCGTATGCCCGTAGCTCCATATTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCGGCCTCTATGCTTGCGTAACCAGCAGCCGCCTCGGGCAGTGACACCACCTACTTCTCCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCGGCCTCTATGCTTGTACTGCCAGTAGGACTGTAGACAGTGAAACTTGGTACTTCATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACAATAGGACAGTGCTTATTGGGGAGTACTTGCAGATAAAGGGCGCCCACGCCCTAGAGACT
                                                                                                                           ATGGGAGCAAGATTGGCCCAGACAACCTGCCTTATGTCCAGATCTTGAAGACTGCTGGAG
                                                                                                                                                                             TGTGTAAGGTGTACAGTGACCCGCAGCCGCACATCCAGTGGCTAAAGCACATCGAGGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                             TCAAATGCCCTTCCAGTGGGACCCCAAACCCCACACTGCGCTGGTTGAAAAATGGCAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTCGCTGCCCAGCCGGGGGAACCCAATGCCAACCATGCGGTGGCTGAAAAACGGGAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCAACCGCACCCGCATCACAGGGGAGGAGGTGGAGGTGCAGGACTCCGTGCCCGCAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGCTGCGGGACGATGTGCAGAGCATCAACTGGCTGCGGGACGGGGTGCAGCTGGCGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           27.7%;
70.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              e 1180.6; DB 2;
. No. 2.9e-280;
ismatches 644;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2662;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
   1402
                                                                                                                                                                                                                                                    1102
                            1153
                                                                           1093
                                                                                                    1282
                                                                                                                            1033
                                                                                                                                                    1222
                                                                                                                                                                           973
                                                                                                                                                                                                                                                                                                                                                    982
                                                                                                                                                                                                                                                                                                                                                                                                    922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        517
                                                                                                                                                                                                                             913
                                                                                                                                                                                                                                                                                                                             793
                                                                                                                                                                                                                                                                                                                                                                             733
                                                                                                                                                                                                                                                                                                                                                                                                                             673
                                                                                                                                                                                                                                                                                                                                                                                                                                                     862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ψ
           δõ
                                     밁
                                                       δÔ
                                                                                    ₽
                                                                                                         δÃ
                                                                                                                                     밁
                                                                                                                                                        QY
                                                                                                                                                                                       В
                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                           Qγ
                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                            Š
                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                            Q
                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                           δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Š
                                                                                                                                                                                                                                                                                                                                                                                                                                      ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
              2423
                                                                                     2108
                                                                                                                                                                                       1988
                                                                                                                                                                                                                                      1928
                                                                                                                                                                                                                                                              2123
                                                                                                                                                                                                                                                                                       1868
                                                                                                                                                                                                                                                                                                                                      1808
                                                                                                                                                                                                                                                                                                                                                                                       1748
                                                                                                                                                                                                                                                                                                                                                                                                               1943
                                                                                                                                                                                                                                                                                                                                                                                                                                        1688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1643
                                 TCACTCTGGGCGGCTCCCCATACCCCGGTGTGCCTGTGGAGGAACTTTTCAAGCTGCTGA
                                                                                                                                                                                  AGGAAGGACACAGAATGGATAAGCCAGCCAACTGCACCAACGAACTGTACATGATGATGA
                                                 TCACTTTAGGGGGCTCGCCCTACCCAGGGATTCCCCGTGGAGGAACTTTTTAAGCTGCTGA
                                                                                   ACCGGATCTACACCCACCAGAGTGATGTGTGGTCTTTCGGGGTGCTCCTGTGGGAGATCT
                                                                                             ATAGAGTATACACTCATCAGAGTGATGTCTGGTCCTTCGGGGTGTTAATGTGGGAGATCT
                                                                                                                                               ACAAAAAGACCACCAATGGGCGGCTTCCAGTCAAGTGGATGGCTCCAGAAGCCCTGTTTG
                                                                                                                                                                                                                                                                                  AGGCCCGGAGGCCCCAGGGCTGGAATACTGCTACAACCCCAGCCACAACCCAGAGGAGC
                                                                                                                                                                                                                                                                                                                                                          GAGCCCGGAGGCCACCCGGGATGGAGTACTCCTATGACATTAACCGTGTTCCTGAGGAGC
                                                                                                                                                                                                                                                                                                                                                                                                 ATGGGCCTCTATGTCATAGTTGAGTATGCCTCTAAAGGCAACCTCCGAGAATACCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGATGAAGATGAATTGGGAAACACAAGAATATCATAAATCTTCTTGGAGCCTGCACACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGATGTTGAAAGATGATGCCACAGAGAAAGACCTTTCTGATCTGGTGTCAGAGATGGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGGCGGAAGCAGTGGGAATTGACAAAGACAAGCCCAAGGAGGCGGTCACCGTGGCCGTGA 1822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTCGGGACAGACTGGTCTTAGGCAAACCCCTGGGAGAGGGCTGCTTTGGGCAGGTGGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAAGAGATAAGCTGACACTGGGCAAGCCCCTGGGAGAAGGTTGCTTTGGGCAAGTGGTCA 1762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCCCCATGCTGGCAGGGGTCTCCCGAGTATGAACTTCCAGAGGACCCAAAATGGGAGTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCATGAACTCTGGGGTTCTTCTGGTTCGGCCATCACGGCTC----TCCTCCAGTGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGCTGACCAAACGTATCCCCCTGCGGAGACAGGTAACAGTTTCGGCTGAGTCCAGCTCCT 1582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGACCGTTCTGGAAGCCCTGGAAGAGAGGCCGGCAGTGATGACCTCGCCCCTGTACCTGG
                                                                                                                                   ATAAAAAGACAACGAACGGCCGACTGCCTGTGAAGTGGATGGCACCCGAGGCATTATTTG
                                                                                                                                                                                                                                                                                                                                                                                    ATGGTCCCTTGTATGTCATCGTGGAGTATGCCTCCAAGGGCAACCTGCGGGAGTACCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                     TGATGAAGATGATCGGGAAGCATAAGAATATCATCAACCTGCTGGGGGGCCTGCACGCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGATGTTGAAGTCGGACGCAACAGAGAAAGACTTGTCAGACCTGATCTCAGAAATGGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGCCAGAGGCTATCGGGCTGGACAAGGACAAACCCAACCGTGTGACCAAAGTGGCTGTGA 1627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTCCCATGCTAGCAGGGGTCTCTGAGTATGAGCTTCCCGAAGACCCTCGCTGGGAGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCATGAACTCCAACACCCCGCTGGTGAGGATAACAACACGCCTCTCTTCAACGGCAGACA 1642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGATAGCCATTTACTGCATAGGGGTCTTCTTAATCGCCTGTATGGTGGTAACAGTCATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGCTGGCCAAGAGCATCCCTCTGCGCAGACAGGTAACAGTGTCTGCTGACTCCAGTGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCTACAAGATGAAGAGTGGTACCAAGAAGAGTGACTTCCACAGCCAGATGGCTGTGCACA
```

1567

1507 1702 1447 1393

1333

1273

1213 1462

2422

2362 2107 2302 2242

2047

1927 2122 1867 2062 1807 2002 1747

Ψ

```
20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-08-323-430-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        B
                                        ; MOLECULE TYPE: US-08-323-430-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 14, Application US/08323430 Patent No. 6344546
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
APPLICANT: Dionne, Craig A
APPLICANT: Crumley, Greg
APPLICANT: Jaye, Michael C
APPLICANT: Schlessinger, Joseph
TITLE OF INVENTION: Fibroblast Growth Factor Receptors
NUMBER OF SEQUENCES: 15
                                                                                                                            TELEFAX: (215) 454-3808 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: US to be assign
FILING DATE: 21-AUG-1992
APPLICATION NUMBER: US 07/549,587
FILING DATE: 06-JUL-1990
ATTORNEY/AGENT INFORMATION:
NAME: Goodman, Rosanne
                                                                                                                                                  NAME: GOODMAN, ROSANNA REGISTRATION NUMBER: 32,534
REFERENCE/DOCKET NUMBER: AO.
TELECOMMUNICATION INFORMATION:
TELEPHONE: (215) 454-3817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2228
                                                                                                  SEQUENCE CHARACTERISTICS:
LENGTH: 2662 base pairs
                                                                                                                                                                                                                                                                                                                            ZIP: 19426
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: PSYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
                                                               TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE: Rhone-Poulenc
STREET: 500 Arcola Road
CITY: Collegeville
STATE: PA
                                                                                                                                                                                                                                                                                          CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACGGCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AACAGTATTCACCTAGTTACCCTGACACAAGAAGTTCT---TGTTCTTCAGGAGATGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TIGGACCGCATCGTGGCCTTGACCTCCAACCAGGAGTACCTGGACCTGTCCATGCCCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGGATCGAATTCTCACTCTCACAACCAATGAGGAATACTTGGACCTCAGCCAACCTCTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGGACTGCTGGCATGCAGTGCCCTCACAGAGACCCCACCTTCAAGCAGCTGGTGGAAGACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGGACTGTTGGCATGCAGTGCCCTCCCAGAGACCAACGTTCAAGCAGTTGGTAGAAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGGAGGGTCACCGCATGGACAAGCCCAGTAACTGCACCAACGAGCTGTACATGATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGTTTTTCTCCAGACCCCATGCCTTACGAACCATGCCTTCCTCAGTATCCACACATAA 2719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCAGTACTCCCCCAGCTTTCCCGACACCCGGAGCTCTACGTGCTCCTCAGGGGAGGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTGCCAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2728
  27.7%;
70.8%;
                                                                                                                                                                                                                                                                  US to be assigned
                                                                                                                                                                                                                                                                                                                  US/08/323,430
                                                                                                                                                                               A0496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Rorer Legal Department
  Score
Pred.
   1180.6; DB 4;
No. 2.9e-280;
                                                                                                                                                                                                                                                                                                                                             #1.25
                Length
                2662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δÔ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                            õ
                                                                                                                                                                                                      Вp
                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                            Q
                                                                                                                                                                                                                                                                                                       Вþ
                                                                                                                                                                                                                                                                                                                           δõ
                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                            õ
                                                                                                                                                                                                                                                                                                                                                                                                         무
                                                                                                                                                                                                                                                                                                                                                                                                                           δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
      g
                         Š
                                                      밁
                                                                           á
                                                                                                      Вb
                                                                                                                            Ş
                                                                                                                                                       뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches 1621;
                             1463
      1274
                                                                                                                                                                                                                                                                                                                                1103
                                                                                                                                                                                                                                                                                                                                                                                1043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          314
                                                                                                                                                                                                                                                                                                                                                         854
                                                                                                                                                                                                                                                                                                                                                                                                                               983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                743
                                                                                                                                                                                                                                                         974
                                                                                                                                                                                                                                                                                                                                                                                                         794
                                                                                                                                                                                                                                                                                                                                                                                                                                                         734
   TCTACAAGATGAAGAGTGGTACCAAGAAGAGTGACTTCCACAGCCAGATGGCTGTGCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
```

```
CCGGCCTCTATGCTTGTACTGCCAGTAGGACTGTAGACAGTGAAACTTGGTACTTCATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACAATAGGACAGTGCTTATTGGGGAGTACTTGCAGATAAAGGGCGCCCACGCCTAGAGAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGCTGCGGGACGATGTGCAGAGCATCAACTGGCTGCGGGACGGGGTGCAGCTGGCGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCCTGTTGANAGATGCCGCCGTGATCAGTTGGACTAAGGATGGGGTGCACTTGGGGGCCCA 517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGTTTAAGCAGGAGCATCGCATTGGAGGCTACAAGGTACGAAACCAGCACTGGAGCCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTCGCTGCCCAGCCGGGGGGAACCCAATGCCATGCGGTGGCTGAAAAACGGGAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGAGGAGAAAGAAACAGATAACACCAAACCAAACCGTATGCCCGTAGCTCCATATTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTTTGTCAGTGAGAACAGTAACAACAA------GAGAGCACCATACTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGAATGTCACAGATGCCATCTCATCCGGAGATGATGACGATGACACCGATGGTGCGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCGGCCTCTATGCTTGCGTAACCAGCAGCAGCAGCGGCAGTGACACCACCTACTTCTCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCAACCGCACCCGCATCACAGGGGAGGAGGTGGAGGTGCAGGACTCCGTGCCCGCAGACT
                                                                                                                                                                                       CTGGGGAATATACGTGCTTGGCGGTAATTCTATTGGGATATCCTTTCACTCTGCATGGT 1342
                                                                                                                                                                                                                                                                                                                                                                             AATTCAAACCTGACCACAGAATTGGAGGCTACAAGGTCCGTTATGCCACCTGGAGCATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCAAATGCCCTTCCAGTGGGACCCCAAACCCCACACTGCGCTGGTTGAAAAATGGCAAAG
                                                                                                                     TGACAGTTCTGCCAGCGCCTGGAAGAGAAAAGGAGATTACAGCTTCCCCAGACTACCTGG
                                                                                                                                                                       CAGGGGAGTATACGTGCTTGGCGGGTAACTCTATCGGACTCTCCCATCACTCTGCATGGT
                                                                                                                                                                                                                                                              TTAACACCACGGACAAAGAGATTGAGGTTCTCTCTATATTCGGAATGTAACTTTTTGAGGACG
                                                                                                                                                                                                                                                                                                                                TCCTGCAAGCAGGGTTGCCCGCCAACAAAACAGTGGCCCTGGGTAGCAACGTGGAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCCTCCAAGCCGGACTGCCGGCAAATGCCTCCACAGTGGTCGGAGGAGACGTAGAGTTTG 1102
AGATAGCCATTTACTGCATAGGGGTCTTCTTAATCGCCTGTATGGTGGTAACAGTCATCC 1462
                                                                                                     TGACCGTTCTGGAAGCCCTGGAAGAGGCCCGGCAGTGATGACCTCGCCCCTGTACCTGG
                                                                                                                                                                                                                                           TTAATACCACCGACAAAGAGATGGAGGTGCTTCACTTAAGAAATGTCTCCTTTGAGGACG
                                                                                                                                                                                                                                                                                                             ATGGGAGCAAGATTGGCCCAGACAACCTGCCTTATGTCCAGATCTTGAAGACTGCTGGAG
                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              644;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Caps
                                                                                                                                       1402
                                                                                                                                                                           1153
                                                                                                                                                                                                                                                                             1282
                                                                                                                                                                                                                                                                                                               1033
                                                                                                                                                                                                                                                                                                                                                                                                                                                    913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            313
                                     1273
                                                                                                       1213
                                                                                                                                                                                                                                             1093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                802
```

```
밁
                   QΥ
                                       Вb
                                                              δÃ
                                                                                       P,
                                                                                                            Q
                                                                                                                                     DЬ
                                                                                                                                                         δÃ
                                                                                                                                                                                    밁
                                                                                                                                                                                                    Q
                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                           QΥ
                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                         γ
                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Дδ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ρy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δĀ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           당
   2348
                        2543
                                              2288
                                                                    2483
                                                                                            2228
                                                                                                                  2423
                                                                                                                                        2168
                                                                                                                                                              2363
                                                                                                                                                                                     2108
                                                                                                                                                                                                          2303
                                                                                                                                                                                                                                 2048
                                                                                                                                                                                                                                                        2243
                                                                                                                                                                                                                                                                               1988
                                                                                                                                                                                                                                                                                                   2183
                                                                                                                                                                                                                                                                                                                           1928
                                                                                                                                                                                                                                                                                                                                                 2123
                                                                                                                                                                                                                                                                                                                                                                                               2063
                                                                                                                                                                                                                                                                                                                                                                                                                     1808
                                                                                                                                                                                                                                                                                                                                                                                                                                           2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1523
                                                                                                                                                                                                                                                                                                                                                                         1868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1883
                                          GGACTGTTGGCATGCAGTGCCCTCCCAGAGACCAACGTTCAAGCAGTTGGTAGAAGACT
              TGGATCGAATTCTCACTCTCACAACCAATGAGGAATACTTGGACCTCAGCCAACCTCTCG
                                                                                       ATGGGCCTCTATGTCATAGTTGAGTATGCCTCTAAAGGCAACCTCCGAGAATACCTCC
TGGACCGCATCGTGGCCTTGACCTCCAACCAGGAGTACCTGGACCTGTCCATGCCCCTGG
                                                                                                                                     TCACTCTGGGCGGCTCCCCATACCCCGGTGTGCCTGTGGAGGAACTTTTCAAGCTGCTGA
                                                                                                                                                                                                                              ATAAAAAGACAACCAACGGCCGACTGCCTGTGAAGTGGATGGCACCCGAGGCATTATTTG
                                                                                                                                                                                                                                                                                                                                     TGGCTTCCCAAAAATGTATTCATCGAGAATTTAGCAGCCAGAAATGTTTTGGTAACAGAAA
                                                                                                                                                                                                                                                                                                                                                                                   AGATGACCTTCAAGGACTTGGTGTCATGCACCTACCAGCTGGCCAGAGGCATGGAGTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                GAGCCCGGAGGCCACCCGGGATGGAGTACTCCTATGACATTAACCGTGTTCCTGAGGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAAGAGATAAGCTGACACTGGGCAAGCCCCTGGGAGAAGGTTGCTTTGGGCAAGTGGTCA 1762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCCCCATGCTGGCAGGGGTCTCCCGAGTATGAACTTCCAGAGGACCCCAAAATGGGAGTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCATGAACTCCAACACCCCGCTGGTGAGGATAACAACACGCCTCTCTTCAACGGCAGACA
                                                                                                                                                  TCACTTTAGGGGGCTCGCCCTACCCAGGGATTCCCCGTGGAGGAACTTTTTAAGCTGCTGA 2422
                                                                                                                                                                                                                                        ACAAAAAGACCACCAATGGGCGGCTTCCAGTCAAGTGGATGGCTCCAGAAGCCCCTGTTTG
                                                                                                                                                                                                                                                                                         ACAATGTGATGAAAATAGCAGAGCTTTGGACTCGCCAGAGATATCAACAATATAGACTATT
                                                                                                                                                                                                                                                                                                                                                                                                                 AGGCCCGGAGGCCCCAGGGCTGGAATACTGCTACAACCCCAGCCACAACCCAGAGGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGATGTTGAAAGATGATGCCACAGAGAAAGACCTTTCTGATCTGGTGTCAGAGATGGAGA 1882
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGGCAGAGGCTATCGGGCTGGACAAGGACAAACCCCAACCGTGTGACCAAAGTGGCTGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGGCGGAAGCAGTGGGAATTGACAAAGACAAGCCCAAGGAGGCGGTCACCGTGGCCGTGA 1822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCATGAACTCTGGGTTCTTCTGGTTCGGCCATCACGGCTC----TCCTCCAGTGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGCTGACCAAACGTATCCCCCTGCGGAGACAGGTAACAGTTTCGGCTGAGTCCAGCTCCT 1582
                                                                                                                                                                                                                                                                           ACAATGTGATGAAGATAGCAGACTTTGGCCTCGCACGGGACATTCACCACATCGACTACT
                                                                                                                                                                                                                                                                                                                         TGGCCTCCAAGAAGTGCATACACCGAGACCTGGCAGCCAGGAATGTCCTGGTGACAGAGG
                                                                                                                                                                                                                                                                                                                                                                     AGCTCTCCTAAGGACCTGGTGTCCTGCGCCTACCAGGTGGCCCGAGGCATGGAGTATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTCGGGACAGACTGGTCTTAGGCAAACCCCTGGGAGAGGGCCTGCTTTGGGCAGGTGGTGT 1567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTCCCATGCTAGCAGGGGGTCTCTGAGTATGAGCTTCCCGAAGACCCTCGCTGGGAGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGCTGGCCAAGAGCATCCCTCTGCGCAGACAGGTAACAGTGTCTGCTGACTCCAGTGCAT
                                                                  2542
                                                                                                                                                                                                                                                      2302
                                                                                                                                                                                                                                                                                                                         1987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1702
2407
                     2602
                                                                                                              2482
                                                                                                                                      2227
                                                                                                                                                                                                                                                                                                 2242
                                                                                                                                                                                                                                                                                                                                               2182
                                                                                                                                                                                                                                                                                                                                                                       1927
                                                                                                                                                                                                                                                                                                                                                                                           2122
                                                                                                                                                                                                                                                                                                                                                                                                                   1867
                                                                                                                                                                                                                                                                                                                                                                                                                                                               1807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1942
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1393
                                                                                                                                                                                                                               2107
                                                                                                                                                                                                                                                                           2047
                                                                                                                                                                                                                                                                                                                                                                                                                                         2062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1747
```

```
밁
                  Qy
                                        В
                                                         Q
                                                                               ₽
                                                                                                  Q
  2528
                    2720
                                         2468
                                                                                2408
TTGCCAATG
                                                 CTGTTTTTTCTCCAGACCCCATGCCTTACGAACCATGCCTTCCTCAGTATCCACACATAA
                                                                                         AACAGTATTCACCTAGTTACCCTGACACAAGAAGTTCT---TGTTCTTCAGGAGATGATT
            ACGGCAGTG
                                      ACCAGTACTCCCCCAGCTTTCCCCGACACCCGGAGCTCTACGTGCTCCTCAGGGGAGGATT
 2536
                   2728
                                       2527
                                                          2719
                                                                                                  2659
                                                                              2467
```

Search completed: December 11, 2002, 14:33:23 Job time: 144 secs

THIS PAGE BLANK (USPTO)

```
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                        Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                              Minimum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OM nucleic -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                        DB
Bd
                                                                                                                                                                                                                                                                                                                                                                                                                    seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                    length: 0
length: 2000000000
            Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        350425 seqs, 194966369 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-954-556-3
4268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   December 11, 2002, 14:21:12; Search time 120 Seconds (without alignments)
13868.608 Million cell updates/sec
                                                                                                                                                                                                                                                                                                Published_Applications_NA: *
:/cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*
:/cgn2_6/ptodata/1/pubpna/US06_RWM_PUB.seq:*
:/cgn2_6/ptodata/1/pubpna/US06_RWM_PUB.seq:*
:/cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq:*
:/cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*
:/cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*
:/cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*
:/cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*
:/cgn2_6/ptodata/1/pubpna/US09_RWM_PUB.seq:*
:/cgn2_6/ptodata/1/pubpna/US09_RWM_PUB.seq:*
:/cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:*
:/cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:*
:/cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:*
:/cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq:*
:/cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq:*
:/cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GenCore version 5.1.3 (c) 1993 - 2002 Compugen Ltd.
```

and is derived by analysis of the total score distribution. Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed.

SUMMARIES

ი		a							ი		ი								Result
19	18	17	16	15	14	w	12	11	10	9	œ	7	σ	G	4	w	2	- ا	ult No.
242	249.4	250.4	253.4	262.4	271.2	275.2	294	319.4	394.2	432	502.8	640.6	643	662.2	1130	1177.2	4268	4268	Score
5.7	5. 8	5.9	5.9	6.1	6.4	6.4	6.9	7.5	9.2	10.1	11.8	15.0	15.1	15.5	26.5	27.6	100.0	100.0	Query
434	413	415	260	618	33239	2782	294	422	446	458	514	2184	848	1451	3454	3726	4268	4268	Query Match Length
10	10	10	9	10	10	9	10	10	10	10	10	10	10	10	12	10	10	10	DB
US-09-960-352-5227	US-09-960-352-5581	US-09-960-352-10423	US-10-040-739-91	US-09-731-872-128	US-09-814-950-3	US-10-108-605-250	US-09-895-828-446	US-09-960-352-6996	US-09-867-701-9869	US-09-895-828-380	US-09-867-701-4969	US-09-728-952-82	US-09-814-950-1	US-09-917-800A-1466	US-10-044-090-48	US-09-925-302-271	US-09-954-456-1599	US-09-954-456-293	ID
Sequence 5227, Ap	Sequence 5581. Ap	Sequence 10423, A	Sequence 91, Appl	Sequence 128, App	Sequence 3, Appli	Sequence 250, App	Sequence 446, App	Sequence 6996, Ap	Sequence 9869, Ap	Sequence 380, App	Sequence 4969, Ap					Sequence 271, App	Sequence 1599, Ap	Sequence 293, App	Description

Query Match 100.0%; Best Local Similarity 100.0%; Matches 4268; Conservative C

0;

0,

Indels

0;

Gaps

0

Score 4268; Pred. No. 0; 0; Mismatches

DB 10; Length 4268;

					,	, c						O								c	c				,
45	44	L)	42	41	40	39	38	37	36	ω	34	ω	32	ω L	30	29	28	27	26	25	24	23	22	21	
159.4	159.4	159.4	159.4	159.4	159.4	166.8	169.4	171.6	171.6	177.4	177.4	179	181.6	192.8	192.8	192.8	194	203	217.2	218.4	225.4	232.6	233.6	235.6	
3.7	3.7	3.7	3.7	3.7	3.7	3.9	4.0	4.0	4.0	4.2	4.2	4.2	4.3	4.5		5		4.8	5.1	5.1	5,3	.4			
6412	6378	4054	3270	3270	3270	332	3992	5084	5084	9108	4425	6827	366	5470	5406	5406	3914	379	352	395	355	391	392	402	1
10	10	9	10	10	10	10	10	10	9	10	10	10	10	10	10	10	12	10	10	10	10	10	10	10	-
US-09-769-987-1	US-09-919-497-40	US-09-955-363-35	US-09-866-510-5	US-09-866-510-3	US-09-866-510-1	US-09-960-352-10875	US-09-944-807-9	US-09-967-768A-277	US-09-954-531-1383	US-09-982-610-45	US-09-982-610-31	US-09-982-610-17	US-09-960-352-10878	US-09-766-678-1	US-09-872-136-5	US-09-919-408-5	US-10-044-090-148	US-09-728-445-340	US-09-960-352-4640	US-09-867-701-3177	US-09-960-352-1177	US-09-960-352-2603	US-09-960-352-4293	US-09-960-352-14442	00-09-300-332-4303
Sequence 1, Appli	Sequence 40, Appl	Sequence 35, Appl	Sequence 5, Appli	Sequence 3, Appli	Sequence 1, Appli	Sequence 10875, A	Sequence 9, Appli	Sequence 277, App	Sequence 1383, Ap	Sequence 45, Appl	Sequence 31, Appl	17,	Sequence 10878, A	Sequence 1, Appli	Sequence 5, Appli	Sequence 5, Appli	Sequence 148, App	Sequence 340, App	Sequence 4640, Ap	Sequence 3177, Ap	•	Sequence 2603, Ap	Sequence 4293, Ap	Sequence 14442, A	sequence 4303, Ap

ALIGNMENTS

RESULT 1 US-09-954-456-293

```
; LENGTH: 4268
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-954-456-293
                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: US/60/234,052
PRIOR FILING DATE: 2000-09-20
PRIOR PRIOR APPLICATION NUMBER: US/60/234,923
PRIOR FILING DATE: 2000-09-25
PRIOR APPLICATION NUMBER: US/60/235,134
PRIOR FILING DATE: 2000-09-25
PRIOR APPLICATION NUMBER: US/60/235,637
PRIOR APPLICATION NUMBER: US/60/235,637
PRIOR APPLICATION NUMBER: US/60/235,638
PRIOR APPLICATION NUMBER: US/60/235,638
PRIOR FILING DATE: 2000-09-26
PRIOR APPLICATION NUMBER: US/60/235,711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 293, Application US/09954456
Patent No. US20020115057A1
GENERAL INFORMATION:
APPLICANT: Young, Paul
                                                                                                                                                SOFTWARE: PatentIn version 3.0 SEQ ID NO 293
                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: US/60/235,720
PRIOR EILING DATE: 2000-09-27
PRIOR APPLICATION NUMBER: US/60/235,840
PRIOR EILING DATE: 2000-09-27
PRIOR APPLICATION NUMBER: US/60/235,863
PRIOR FILING DATE: 2000-09-27
PRIOR FILING DATE: 2000-09-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: Process for Identifying Anti-Cancer Therapeutic Agents Using TITLE OF INVENTION: Sets
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT FILING DATE: 2001-09-18
PRIOR APPLICATION NUMBER: US/60/233,617
PRIOR FILING DATE: 2000-09-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/09/954,456
CURRENT FILING DATE: 2001-09-18
                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 2276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILE REFERENCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   689290-76
```

1080	GAGCGATCGCCTCACCGGCCCATCCTCCAAGCCGGACTGCCGGCAAATGCCTCCACAGTG	1021 1021	р _О у
1020	ACCTGTGTGGTGGAGAATGAATACGGGTCCATCAATCACACGTACCACCTGGATGTTGTG	961 961	Ор
960	CGAAACCAGCACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCTGACAAGGGAAATTAT	901 901	Db Qy
900	CGGTGGCTGAAAAACGGGAAGGAGTTTAAGCAGGAGCATCGCATTGGAGGCTACAAGGTA 	841 841	Db cy
840	CCTGCGGCCAACACTGTCAAGTTTCGCTGCCCAGCCGGGGGAACCCAATGCCAACCATG	781 781	pb dy
780 780	AACAAGAGAGCACCATACTGGACCAACACAGAAAAGATGGAAAAGCGGCTCCATGCTGTG	721 721	D Oy
720 720	TCCGGAGATGATGAGATGACACCGATGGTGCGGAAGATTTTGTCAGTGAGAACAGTAAC	661 661	Db
660 660	AGTAGGACTGTAGACAGTGAAACTTGGTACTTCATGGTGAATGTCACAGATGCCATCTCA	601	Db Oy
600	GAGTACTTGCAGATAAAGGGCGCCACGCCTAGAGACTCCGGCCTCTATGCTTGTACTGCC	541 541	Db Oy
540	ATCAGTTGGACTAAGGATGGGGTGCACTTGGGGCCCAACAATAGGACAGTGCTTATTGGG	481	ду
480 480	TACGTGGCTGCGCCAGGGGAGTCGCTAGAGGTGCGCTGCTGTTGAAAGATGCCGCCGTGIIIIIIIIII	421 421	Db Oy
420 420	GATACCACATTAGAGCCAGAAGAGCCACCAACCAAATACCAAATCTCTCAACCAGAAGTG		d do
360 360	CTGGTCGTGGTCACCATGGCAACCTTGTCCCTGGCCCGGCCCTCCTTCAGTTTAGTTGAG	301 301	dg Vo
300	TATGGAAGAGGACCGGGGATTGGTACCGTAACCATGGTCAGCTGGGGTCGTTTCATCTGC	241 241	D Q
240	TTGCGCGTAGTCCATGCCCGTAGAGGAAGTGTGCAGATGGGATTAACGTCCACATGGAGA	181 181	DB Q
180 180	AAGTGACTGCAGCAGCAGCGGCAGCGCACCGTTCGTTGAGCCCACCGCAGGCTGAAGGCA	121 121	dq VQ
120 120	TCCATCCCGACCCACGCGGGGGGGGGGACAACACAGGTCGCGGAGGAGGGTTGCCATTC	61	Оy
60	CCCAAGGACCACTCTTCTGCGTTTGGAGTTGCTCCCCACAACCCCGGGGTCGTCGCTTTC	<u>.</u>	Db Qy

2220	AGAAATGTTTTGGTAACAGAAAACAATGTGATGAAAATAGCAGACTTTGGACTCGCCAGA	2161	Qy
2160		2101	. ეხ
2160	TGGCCAGAGGCATGGAGTACTTGGCTTCCCCAAAAATGTATTCATCGAGATTTAGCAGCC	2101	Оу
2100	STGTTCCTGAGGAGCAGATGACCTTCAAGGACTTGGTGTCATGCACCTACCAG	2041	. Dp
2100	AACCGTGTTCCTGAGGAGCAGATGACCTTCAAGGACTTGGTGTCATGCACCTACCAG	2041	у
2040	GCAACCTCGAGAATACCTCGAGCCCGGAGGCCACCGGGATGGAGTACTCCTATGAC	1981	Оу
			? ;
1980	CTTCTTGGAGCCTGCACACGGATGGGCCTCTCTATGTCATAGTTGAGTATGCCTCTAAA [1921	рь
1920	ATCTGGTGTCAGAGATGGAGATGATGAAGATTGGGAAACACAAGAATATCATAAAT		οδ
1920	GATCTGGTGTCAGAGATGGAGATGATGAAGATGATTGGGAAACACAAGAATATCATAAAT		Оу
1860	GAGGCGGTCACCGTGGCCGTGAAGATGTTGAAAGATGATGATGCCACAGAGAAAAGACCTTTCT	1801	Дb
1860	AGGCGGTCACCGTGGCCGTGAAGATGTTGAAAGATGATGCCACAGAGAAAGACCTTTCT	1801	Qy
1800	GGTTGCTTTGGGCAAGTGGTCATGGCGGAAGCAGTGGGAATTGACAAAGACAAGCCCAAG	1741	Db
1800	GTTGCTTTGGGCAAGTGGTCATGGCGGAAGCAGTGGGAATTTGACAAAGACAAGCCCAAG	1741	Qy
1740	GAGGACCCAAAATGGGAGTTTCCAAGAGATAAGCTGACACTGGGCAAGCCCCTGGGAGAA	1681	σb
1740		1681	Оу
1680	CGCCTCTCTTCAACGGCAGACACCCCCATGCTGGCAGGGGTCTCCGAGTATGAACTTCCA	1621	Db
1680	GCCTCTCTTCAACGGCAGACACCCCCATGCTGGCAGGGGTCTCCGAGTATGAACTTCCA	1621	Qy
1620	GTTTCGGCTGAGCTCCTCCATGAACTCCAACACCCCGCTGGTGAGGATAACAACA	1561	Db
1620	AACA	1561	Qy
in		(G	рb
1560	GTAACA	1501	Qy
Ċ		4	Db
1500	GTATGGTGGTAACAGTCATCCTGTGCCGAATGAAGAACACGACCAAGAAGCCAGACTTC	1441	ογ
4		8	Db
4	CAGACTACCTGGAGATAGCCATTTACTGCATAGGGGTCTTCTTAATCGCC	381	ο _γ
L	HIIIIIIIII	321	da Z
1380	CACTCTGCATGGTTGACAGTTCTGCCAGCGCCTGGAAGAGAAAAGGAGATT	321	ον
1320	CGGAATGTAACTTTTGAGGACGCTGGGGAATATACGTGCTTGGCGGGTAATTCTATTGGG	1261	Db
1320	3TAACTTTTGAGGACGCTGGGGAATATACGTGCTTGGCGGGTAATTCTATTGGG	1261	Qy
1260	AAGGTTCTCAAGGCCGCCGGTGTTAACACCACGGACAAAGAGATTGAGGTTCTCTATATT	1201	Db
1260	CTCAAGGCCGCCGGTGTTAACACCACGGACAAAGAGATTGAGGTTCTCTATATT	1201	Qy
	CANGCACGTGGAAAAGAACGGCAGTAAATACGGGCCCGAACGGGCTGCCCTACCTC	1141	Db
3		1	2
1140	GTCGGAGGAGACGTAGACTTGTCTGCAAGGTTTACAGTGATGCCCAGCCCACATCCAG - - - - - - - - - - - - -	1801	Db Oy
_	こくしゅう く くりしゅう はくしょう とくしゅ はん はん はん はんしょう というしゅん はんしょう というしょう しょうしょう はんしょう しょうしょう しゅうしょう しょうしょう しょうしょう しゅうしょう しゅうしゅう しゅうしゅう しゅうしゅう しゅうしょう しゅうしゅう しゅうしょう しゅうしゅう しゅう	-	-

3300	TITTAATAGCTATTTGCTAAATGCTGTTCTTACACATAATTTCTTAATTTTCACCGAGCA	3241	Qy
3240 3240	TATTTTTGTATTGATTTAAATGGATGTCCCAATGCACCTAGAAAATTGGTCTCTCTTT	3181 3181	рь
3180 3180	TGGATGTATGTAAATATTCAAATTATGTATAAATATATAT	3121 3121	Db Qy
3120 3120	TAATTGGAGAAGATTTATGTCAGCACACACTTACAGAGCACAAATGCAGTATATAGGTGC	3061 3061	Db Qy
3060 3060	GCTGTGGACCAGTAGGACTCAAGGTGGACGTGCGTTCTGCCTTCCTT	3001	Db Qy
3000	TCTGGAGCAGTGGACTGCCACAAGCCACCATGTAACCCCTCTCACCTGCCGTGCGTTCTG	2941 2941	Db
2940 2940	TATGTGTAAAGATTTATACAGTTGAAAACTTGTAATCTTCCCCAGGAGGAGGAGAAGATGTT	2881 2881	ρ δ
2880 2880	TTGTTGTCTCCACTTGTATATATGGATCAGAGGAGTAAATAATTGGAAAAGTAATCAGCA	2821 2821	g 9
2820 2820	CAAACAGGACAGCACTGGGAACCTAGCTACACTGAGCAGGGAGACCATGCCTCCCAGAGC	2761 2761	Db Qq
2760 2760	CCTCAGTATCCACACATAAACGGCAGTGTTAAAACATGAATGA	2701 2701	р
2700 2700	TGTTCTTCAGGAGATGATTCTGTTTTTTCTCCAGACCCCATGCCTTACGAACCATGCCTT	2641 2641	P 64
2640 2640	TTGGACCTCAGCCAACCTCTCGAACAGTATTCACCTAGTTACCCTGACACAAGAAGTTCT	2581 2581	40 40
2580 2580	TTCAAGCAGTTGGTAGAAGACTTGGATCGAATTCTCACTCTCACAACCAATGAGGAATAC	2521 2521	β Q
2520 2520	AACGAACTGTACATGATGAGGGGACTGTTGGCATGCAGTGCCCTCCCAGAGACCAACG	2461 2461	g Q
2460 2460	GAGGAACTTTTTAAGCTGCTGAAGGAAGGACACAGAATGGATAAGCCAGCC	2401	Оy
2400 2400	GGGGTGTTAATGTGGGAGATCTTCACTTTAGGGGGCTCGCCCTACCCAGGGATTCCCCTG	2341 2341	DЬ
2340 2340	ATGGCTCCAGAAGCCCTGTTTGATAGAGTATACACTCATCAGAGTGATGTCTGGTCCTTC	2281 2281	p Qy
2280 2280	GATATCAACAATATAGACTATTACAAAAAGACCACCAATGGGCGGCTTCCAGTCAAGTGG	2221 2221	Db Qy
2220		2161	Db

	₹:	4261	ф
	- AA	4261	Qy
4260	L ATGTTTCTACAGATATTAATGTTAACAAGACAAAATAAAT	4201	DЬ
4260	TGTTTCTACAGATATTAATGTTAACAAGACAAAATAAATGTCACGCAACTTAAA	4201	Qγ
4200	GTTACAAAA	4141	Db
4200	TTACAAAATTGGAGAAAGTATTTAATAAAACCTGTTAATTTTTATACTGACAATAA	4141	Qy
4140	- ≵:	4081	Db
4140	AAACACCCACTCACTTGCAATAGCCGTGCAAGATGAATGCAGATTACACTGATCTTAT	4081	Qγ
4080	TACATCAGACAAAATATCGCCGTTGTTCCTTCTGTACTAAAGTATTGTGTTTTGCTTTGG	4021	Db
4080	ACATCAGACAAAATATCGCCGTTGTTCCTTCTGTACTAAAGTATTGTGTTTTTGCTTTG	4021	Qy
4020	TTAAGG	3961	DЬ
4020	. TTAAGGGATTGCTTTCATCTAATTCTGGCAGGACCTCACCAAAAGATCCAGCCTCATAC	3961	Qy
3960	CATAGAAAATTGAAACACAG	3901	Db
3960	GAAAATTGAAACACAGAGTTGTTCTGCTGATAGTTTTGGGGATACGTCCATCTT	3901	Qy
3900	TTTGATAATGGCTTCCAGACTCTTTGCGTTGGAGACGCCTGTTAGGATCTTCAAGTCCCA	3841	Dp
3900	TTGATAATGGCTTCCAGACTCTTTGCGTTGGAGACGCCTGTTAGGATCTTCAAGTCCC	3841	Оу
3840	GCTGGCCTTCTGCTTCTGAGTTGCACATTAATCAGATTAGCCTGATTCTCTTCAGTGAAT	3781	рь
3840	GCTGGCCTTCTGCTTCTGAGTTGCACATTAATCAGATTAGCCTGATTCTCTTCAGTC	.3781	Qy
3780		3721	В
3780	ATCCATTCCTTGAGGACAGACCTTAGTTGAAATGATAGCAGAATGTGCTTCTCTCTGGC	3721	Qy
72		3661	Db
3720	AACGTCTAACTGGACTTCCCCAAGATAAATGGTACCAGCGTCCTCTTAAAAGATGCCTT	3661	Qy
3660		3601	ф
3660	AACTCATTCATAGGAAGGTGTTTCATTTTGGTGTGCAACCCTGTCATTACGTCAAC	3601	Оу
3600	-	3541	Db
3600	TIGIGITITAAATGCIGCIGICAGACGATTGTTCTTAGACCTCCTAAATGCCCCCATATI	3541	Qγ
3540	:3 -	3481	рь
3540	TTTGAAAAGAGAATATTTACAATATATGACTAATTTGGGGAAAATGAAGTTTTGATTT	3481	οy
3480	ATGCAGGCAGCAGAGTAGTTAATCTATTGCTTGGACTTAACTAGTTATCAGATCC	3421	Db
3480	ATGCAGGCAGCAGCAGACTAGTTAATCTATTGCTTGGACTTAACTAGTTATCAGATCC	3421	Оу
3420	TGGTAATATACAAAACAATTAATCATTTATAGTTTTTTTT	3361	ДĎ
3420	. TGGTAATATACAAAACAATTAATCATTTATAGTTTTTTTT	3361	Qy
3360	GAGGTGGAAAAATACTTTTGCTTTCAGGGAAAATGGTATAACGTTAATTTAATTAA	3301	DЪ
3360	. GAGGTGGAAAAATACTTTTTGCTTTCAGGGAAAATGGTATAACGTTAATTTAATAAA	3301	δδ
3300	TTTTAATAGCTATTTGCTAAATGCTGTTCTTACACATAATTTCTTAATTTTCACCGAGCA	3241	Дb

RESULT 2 US-09-954-456-1599

```
TITLE OF INVENTION: Sets
FITTLE OF INVENTION: Sets
FITTLE OF INVENTION: Sets
FILLE OF INVENTION: UNMBER: US/60/234,456
CURRENT FILLING DATE: 2000-09-18
PRIOR FILLING DATE: 2000-09-25
PRIOR APPLICATION NUMBER: US/60/234,923
PRIOR FILLING DATE: 2000-09-25
PRIOR APPLICATION NUMBER: US/60/235,637
PRIOR APPLICATION NUMBER: US/60/235,637
PRIOR APPLICATION NUMBER: US/60/235,637
PRIOR APPLICATION NUMBER: US/60/235,731
PRIOR APPLICATION NUMBER: US/60/235,731
PRIOR APPLICATION NUMBER: US/60/235,731
PRIOR APPLICATION NUMBER: US/60/235,720
PRIOR APPLICATION NUMBER: US/60/235,720
PRIOR APPLICATION NUMBER: US/60/235,840
PRIOR FILING DATE: 2000-09-27
PRIOR APPLICATION NUMBER: US/60/235,863
PRIOR APPLICATION NUMBER: US/60/235,838
PRIOR APPLICATION NUMBER: US/60/235,838
PRIOR P
                                                       Š
                                                                                            Ър
                                                                                                                     Ş
                                                                                                                                                     밁
                                                                                                                                                                           δ
                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                ρy
                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                           Š
                                                                                                                                                                                                                                                                                                                                                                                                                    ş
   Ş
                                 밁
                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 4268; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 1599, Application Patent No. US20020115057A1 GENERAL INFORMATION: APPLICANT: Young, Paul
      421
                                   361
                                                               361
                                                                                            301
                                                                                                                         301
                                                                                                                                                       241
                                                                                                                                                                                 241
                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                           -
                                                                                                                                                                                                                                                                                                                                                                                                                       ட
                                                                                         CTGGTCGTGGTCACCATGGCAACCTTGTCCCTGGCCCGGCCCTCCTTCAGTTTAGTTCAG
                                                                                                                                                                                                                                                                                                                                                                                        GATACCACATTAGAGCCAGAAGAGCCACCAACCAAATACCAAATCTCTCAACCAGAAGTG
                                                                                                                                                                   TATGGAAGAGGACCGGGGATTGGTACCGTAACCATGGTCAGCTGGGGTCGTTTCATCTGC
                                                                                                                                                                                                                                                                    AAGTGACTGCAGCAGCAGCGGCAGCGCCCTCGGTTCCTGAGCCCACCGCAGGCTGAAGGCA 180
                                                                                                                                                                                                                                                                                                                              TTGCGCGTAGTCCATGCCCGTAGAGGAAGTGTGCAGATGGGATTAACGTCCACATGGAGA
                                                                                                                                                     TATGGAAGAGGACCGGGGATTGGTACCGTAACCATGGTCAGCTGGGGTCGTTTCATCTGC
                                                                                                                                                                                                              TTGCGCGTAGTCCATGCCCGTAGAGGAAGTGTGCAGATGGGATTAACGTCCACATGGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%;
ilarity 100.0%;
Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          for Identifying Anti-Cancer Therapeutic
                                                                                                                                                                                                                                                                                                                                                                                                                                                      0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 4268;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ₽B
                                                                                                                                                                                                                                                                                                                                                                                                                                                    0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                           60
    480
                                                            420
                                                                                           360
                                                                                                                      360
                                                                                                                                                    300
                                                                                                                                                                                 300
                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                       60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Agents
                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cano
                Ş
                                              밁
                                                                        δõ
                                                                                                     밁
                                                                                                                                 Ŷ
                                                                                                                                                                Дb
                                                                                                                                                                                            ð
                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                               멍
                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                   õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                1501
                                                                                                                                                                                                                                                                                     1201
                                                                                                                                                                                                                                                                                                                                               1141
                                                                                                                                                                                                                                                                                                                                                                          1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1021
                                                                                                                                                                                                                            1261
                                                                                                                                                                                                                                                        1261
                                                                                                                                      1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     421
                                                                                                                                                               GAGCGATCGCCTCACCGGCCCATCCTCCAAGCCGGACTGCCGGCAAATGCCTCCACAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCTGTGTGGTGGAGAATGAATACGGGTCCATCAATCACACGTACCACCTGGATGTTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CGGTGGCTGAAAAACGGGAAGGAGTTTAAGCAGGAGCATCGCATTGGAGGCTACAAGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCTGCGGCCAACACTGTCAAGTTTCGCTGCCCAGCCGGGGGGAACCCAATGCCAACCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AACAAGAGAGCACCATACTGGACCAACACAGAAAAGATGGAAAAGCGGCTCCATGCTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ### TACGTGGCTGCCCAGGGGAGTCGCTAGAGGTGCGCTGCTGTTGAAAGATGCCGCCGTG
AGCAGCCAGCCGGCTGTGCACAAGCTGACCAAACGTATCCCCCCTGCGGAGACAGGTAACA
                                                          TGTATGGTGGTAACAGTCATCCTGTGCCGAATGAAGAACACGACCAAGAAGCCAGACTTC
                                                                                                    AAGGTTCTCAAGGCCGCCGGTGTTAACACCACGGACAAAGAGATTGAGGTTCTCTATATT
                                                                                                                                                                                                                                                                                                                                                           GTCGGAGGAGACGTAGAGTTTGTCTCCCAAGGTTTTACAGTGATGCCCAGCCCCCACATCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGAAACCAGCACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCTGACAAGGGAAATTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATCAGTTGGACTAAGGATGGGGTGCACTTGGGGCCCCAACAATAGGACAGTGCTTATTGGG
                                            TGTATGGTGGTAACAGTCATCCTGTGCCGAATGAAGAACACGACCAAGAAGCCAGACTTC
                                                                                                                                                                                                                                                                                    AAGGTTCTCAAGGCCGCCGGTGTTAACACCACGGACAAAGAGATTGAGGTTCTCTATATT
                                                                                                                                                                                                                                                                                                                                             TGGATCAAGCACGTGGAAAAGAACGGCAGTAAATACGGGCCCGACGGGCTGCCCTACCTC
                                                                                                                                                                                                                                                                                                                                                                                                        GTCGGAGGAGACGTAGAGTTTGTCTGCAAGGTTTACAGTGATGCCCAGCCCCACATCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAGCGATCGCCTCACCGGCCCATCCTCCAAGCCGGACTGCCGGCAAATGCCTCCACAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGAAACCAGCACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCTGACAAGGGAAATTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCAGTTGGACTAAGGATGGGGTGCACTTGGGGCCCCAACAATAGGACAGTGCTTATTGGG
                                                                          1500
                                                                                                       1440
                                                                                                                                   1440
                                                                                                                                                                                             1380
                                                                                                                                                                                                                                                                                                                1260
                                                                                                                                                                                                                                                                                                                                                                         1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1020
                1560
                                            1500
                                                                                                                                                                1380
                                                                                                                                                                                                                                                       1320
                                                                                                                                                                                                                                                                                                                                             1200
                                                                                                                                                                                                                                                                                                                                                                                                        1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        720
```

25	25	24	24	2 2	2 2	2 2	22 22	2 2	20 20	12 12	11 11	= =	= =	5 5		<u> </u>	E E	15
81	21 21	61 61	01	2341 G 2341 G	2281 A 2281 A	2221 G 	2161 A 2161 A	2101 C 2101 C	041 A	981 G	921 C 921 C	861 G 861 G	801 G	741 G 741 G	681 G/	621 C 621 C	561 G	21
TTGGACCTCA TTGGACCTCA	TTCAAG TTCAAG	AACGAA AACGAA	AGGAA HIIII AGGAA	GGGTG GGGTG	ATGGCTC ATGGCTC	ATATO	AGAAATGTTT AGAAATGTTT	CTGGCC	ATTAACC	GCAAC GCAAC	TICII	ATCTG	AGGCG AGGCG	GTTGC	AGGAC HHHH AGGAC	GCCTC	TTTCG	GCAGO
CTCAG	CAGTT	CTGTA	CTTTT	TTAAT	CCAGA	AACA#	GTTTT	AGAGO 	CGTGT	CTCC	GGAGG	GTGTC	GTCAC	TTTGG		HOTTO	GCTG	CAGC
CCAAC	GGTAC	CATG	TAAGO	GTGG	AGCCC	TATAC	GGTA	CATG	TCCT	AGAAS AGAAS	CTGC	AGAGA AGAGA	CGTG	GCAA	ATGG	AACG	AGTCC	GGCT
CTCTC	AAGAC AAGAC	VIGATO	TGCTC	BAGATO	TGTT	ACTAS ACTAS	CAGA/	AGTAC AGTAC	SAGGAG SAGGAG	PACCTO	CACAC	ATGGA	SCCGTO	GTGGTO	AGTT	GCAGA(GCAGA(AGCTC	3TGCA
GAACI	TTGG	AGGG	SAAGGA SAAGGA	TTCAC	FGATA	TACA	NAACA	TTGG	GCAGA:	CCGAG	GATG	SATGA	SAAGA SAAGA	CATGG	PCCAA	CACCC	OTCCA	CAAGC
AGTAT	ATCGA.	ACTGT	AAGGA	CTTTA	SAGTA	AAAAG HIIII AAAAG	ATGTG. ATGTG.	CITCO	TGACC	00000 000000	GCCT	FGAAG FGAAG	rgijg IIII	CGGAA CGGAA	GAGAT. GAGAT.	CCATG	TGAAC TGAAC	TGACC
FCACC	AGAAGACTTGGATCGAATTCTCACTCTCAC 	AACTGTACATGATGAGGACTGTTGGCATGCAGTGCO	CACAG HIIII CACAG	66666 	TACAC	ACCAC	ATGAA ATGAA	CAAAA CAAAA	TTCAA	AGGCC HIIII AGGCC	CTCTA	ATGAT	AAAGA AAAGA	GCAGT GCAGT	AAGCT AAGCT	CTGGC	TCCAA	AAACG
TAGTT.	CACTO	TGCAG TGCAG	AATGG AATGG	CTCGC	TCATC	CAATG CAATG	AATAG AATAG	ATGTA ATGTA	GGACT GGACT	ACCCG ACCCG	TGTCA	TGGGA TGGGA	TGATG - - - TGATG	GGGAA 	GACAC GACAC	AGGGG AGGGG	CACCC CACCC	TATCC
AGCCAACCTCTCGAACAGTATTCACCTAGTTACCCTGACACAAG.	TCACA TCACA	TGCCC	GAGGAACTITTTAAGCTGCTGAAGGAAGGACACAGAATGGATAAGCCAGCC	CCTAC	AGAGT AGAGT	GATATCAACAATATAGACTATTACAAAAAGACCACCAATGGGCGGCTTCCAGTCAAGTGG 	TTTGGTAACAGAAAACAATGTGATGAAAATAGCAGACTTTGGACTCGCCAG; 	CAGAGGCATGGAGTACTTGGCTTCCCAAAAATGTATTCATCGAGATTTAGCAGCC 	TGGTG TGGTG	GGATG GGATG	TAGTT TAGTT	AACAC AACAC	CCACA	TTGAC	TGGGC 	TCTCC	CGCTG	CCCTG
GACAC GACAC	CAACCAATGAC CAACCAATGAC	CTCCCAGI	CCAGC 	CCAGG	GATGT GATGT	CTTCC	TTTGG TTTGG	CGAGA CGAGA	TCATG	GAGTA GAGTA	GAGTA GAGTA	AAGAA AAGAA	GAGAA GAGAA	AAAGA AAAGA	AAGCC 11111 AAGCC	GAGTA	GTGAG GTGAG	CGGAG
AAGAAGT AAGAAGT		6A - A	CAACT	GATTC	CIGGI	AGTCA AGTCA	ACTCG	TTTAG	CACCT	CTCCT	TGCCT	TATCA	AGACC AGACC	CAAGC 11111 CAAGC	CCTGG	TGAAC	GATAA	ACAGG
GTTCT GTTCT	GGAATAC GGAATAC	CAACG	GCACC 	GGGTGTTAATGTGGGAGATCTTCACTTTAGGGGGCTCGCCCTACCCAGGGATTCCCGTG 	TCCAGAAGCCCTGTTTGATAGAGTATACACTCATCAGAGTGATGTCTGGTCCTTC	AGTGG AGTGG	CCAGA	CAGCC CAGCC	CGTGTTCCTGAGGAGCAGATGACCTTCAAGGACTTGGTGTCATGCACCTACCAG	GGCAACCTCCGAGAATACCTCCGAGCCCGGAGGCCACCCGGGATGGAGTACTCCTATGAC	CTTCTTGGAGCCTGCACACAGGATGGGCCTCTCTATGTCATAGTTGAGTATGCCTCTAAA 	GATCTGGTGTCAGAGATGGAGATGATGAAGATGATTGGGAAACACAAGAATATCATAAAT 	GAGGCGGTCACCGTGGCCGTGAAGATGTTGAAAGATGATGCCACAGAGAAAGACCTTTCT 	GGTTGCTTTGGGCAAGTGGTCATGGCGGAAGCAGTGGGAATTGACAAAGACAAGCCCAAG	GAGGACCCAAAATGGGAGTTTCCAAGAGATAAGCTGACACTGGGCAAGCCCCTGGGAGAA 	CGCCTCTCTTCAACGGCAGACACCCCCATGCTGGCAGGGGTCTCCGAGTATGAACTTCCA	GTTTCGGCTGAGTCCAGCTCCTCCATGAACTCCAACACCCCGGTGGTGAGGATAACAACA	AGCAGCCAGCCGGCTGTGCACAAGCTGACCAAACGTATCCCCCTGCGGAGACAGGTAACA
2640 2640	2580 2580	2520 2520	2460 2460	2400 2400	2340 2340	2280 2280	2220	2160 2160	2100 2100	2040	1980	1920 1920	1860 1860	1800	1740	1680	1620	1560
da :	o	S & &	S B 5	P 5	DB 49	, pp. 75) B 5	P 5	2 B 5) B (\$) B 5	2 2 4	S B 5) B 5	2 8 5	2 B 5		0
w	ωωψ	u w u	سانسان	ا دساد	بادى د		, ա ա	ப ப		سا دسا د								₹ N
61	661 6	41	18 21	21	61	301	241	181	21 7	61 61	001		881	821	761	2 2 2	641	641
CAA	CAA CAA	110 110	11-1	ATG	TG0	GAG		3=3	g = g	7 - F	8=8	13 - 13	TALES		5=5	3=2] []	3

5 B 5

оу Оу

ор Оу Оу Оу

```
APPLICANT: ROSEN et al.
TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies
FILE REFERENCE: PA104
CURRENT APPLICATION NUMBER: US/09/925,302
CURRENT FILING DATE: 2001-08-10
PRIOR APPLICATION NUMBER: PCT/US00/05918
PRIOR FILING DATE: 2000-03-08
PRIOR FILING DATE: 2000-03-08
PRIOR PRIOR FILING DATE: 1999-03-12
NUMBER OF SEQ ID NOS: 896
SOFTWARE: PAtentin Ver. 2.0
SEQ ID NO 271
LENGTH: 3726
                                                                                                                                                                                                                                                                                                                                      RESULT 3
US-09-925-302-271
                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                    Sequence 271, Application US/09925302 Patent No. US20020044941A1 GENERAL INFORMATION:
          OTHER INFORMATION: n equals NAME/KEY: misc feature
                                                     NAME/KEY: misc feature
LOCATION: (3523)
OTHER INFORMATION: n equals
                                                                                      NAME/KEY: misc feature
LOCATION: (2586)
OTHER INFORMATION: n equals
                                                                                                                        ORGANISM: HOMO FEATURE:
                                                                                                                                                TYPE: DNA
                                NAME/KEY: misc feature LOCATION: (3664)
LOCATION: (3687)
                                                                                                                                                                                                                                                                                                                                                                                                                                                     4201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTAAGGGATTGCTTTCATCTAATTCTGGCAGGACCTCACCAAAAGATCCAGCCTCATACC
                                                                                                                                                                                                                                                                                                                                                                                   AAAAAAAA 4268
                                                                                                                                                                                                                                                                                                                                                                                                                                        TGTTACAAAATTGGAGAAAGTATTTAATAAAAACCTGTTAATTTTTATACTGACAATAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TACATCAGACAAAATATCGCCGTTGTTCCTTCTGTACTAAAGTATTGTGTTTTGCTTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TACATCAGACAAAATATCGCCGTTGTTCCTTCTGTACTAAAGTATTGTGTTTTTGCTTTTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAAAAAA 4268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTTGATAATGGCTTCCAGACTCTTTGCGTTGGAGACGCCTGTTAGGATCTTCAAGTCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGTTACAAAATTGGAGAAAGTATTTAATAAAACCTGTTAATTTTTATACTGACAATAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                              sapiens
                                                                                        a,t,
                      ā
                                                      ø
                                                      Ġ
                      õ
                                                                                        ç
                                                      ç
                                                                                        a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3780
```

```
; OTHER INFORMATION: n
US-09-925-302-271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               γQ
            Ş
                                       망
                                                               õ
                                                                                          밁
                                                                                                                Ş
                                                                                                                                             뫄
                                                                                                                                                                       Ş
                                                                                                                                                                                                   밁
                                                                                                                                                                                                                          80
                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                           δõ
                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                    õ
                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ő
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           日
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity Matches 1608; Conserv
             1426
                                                                                                                                                                                                                              1186
                                                                                                                                                796
                                                                                                                                                                                                                                                                                                           616
                                                                                                                                                                                                                                                                                                                                                                                                                  496
                                                                                                                                                                                                                                                                                                                                                                                                                                         946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       481 ATCAGTTGGACTAAGGATGGGGTGCACTTGGGGCCCAACAATAGGACAGTGCTTATTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16
                                                                                                                                                                                                 GTCTTCTTAATCGCCTGTATGGTGGTAACAGTCATCCTGTGCCGAATGAAGAACACGACC
                                                                                                           GGTAATTCTATTGGGATATCCTTTCACTCTGCATGGTTGACAGTTCTGCCAGCGCCTGGA
                                                                                                                                                              GAGGTTCTCTATATTCGGAATGTAACTTTTGAGGACGCTGGGGAATATACGTGCTTGGCG
                                                                                                                                                                                                                                                    CAGCCGCACATCCAGTGGCTAAAGCACATCGAGGTGAATGGGAGCAAGATTGGCCCAGAC
                                                                                                                                                                                                                                                                       CAGCCCCACATCCAGTGGATCAAGCACGTGGAAAAGAACGGCAGTAAATACGGGCCCGAC
                                                                                                                                                                                                                                                                                                                          AATGCCTCCACAGTGGTCGGAGGAGACGTAGAGTTTGTCTGCAAGGTTTACAGTGATGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGAGGCTACAAGGTACGAAACCAGCACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCAATGCCAACCATGCGGTGGCTGAAAAACGGGGAAGGAGTTTAAGCAGGAGCATCGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGGCTCCATGCTGTGCCTGCGGCCAACACTGTCAAGTTTCGCTGCCCAGCCGGGGGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AACAA------GAGAGCACCATACTGGACCAACACAGAAAAGATGGAAAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCGGAGATGATGAGGATGACACCGATGGTGCGGAAGATTTTGTCAGTGAGAACAGTAAC
                                       GAGAGGCCGGCAGTGATCATCGCCCCCTGTACCTGGAGATCATCATCTATTGCACAGGG
                                                                                                                                                GAGGTGCTTCACTTAAGAAATGTCTCCTTTGAGGACGCAGGGGAGTATACGTGCTTGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCAAACCCCACACTGCGCTGGTTGAAAAATGGCAAAGAATTCAAACCTGAYCACAGAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAATTGCATGCAGTGCCGGCTGCCAAGACAGTGAAGTTCAAATGCCCTTCCAGTGGGRCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCAAACCAAACCGTATGCCCGTAGCTCCATATTGGACATCCCCAGAAAAGATGGAAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCCTCGGAGGATGATGATGATGATGACTCCTCTTCAGAGGGAKAAGAAACAGATAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGCAGCCCCTCGGGCAGTGACACCACCTACTTCTCCGTCAATGTTTCARATGCTCTCCCC
                                                                                            GGTAACTCTATCGGACTCTCCCATCACTCTGCATGGTTGACCGTTCTGGAAGCCCTGGAA
                                                                                                                                                                                                                                                                                                           AACAAAACAGTGGCCCTGGGTAGCAACGTGGAGTTCATGTGTAAGGTGTACAGTGACCCG
                                                                                                                                                                                                                                                                                                                                                                                                                 GACAAGGGCAACTACACCTGCATTGTGGAGAATGAGTACGGCAGCATCAACCACACATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGAGGCTACAAGGTCCGTTATGCCACCTGGAGCATCATAATGGACTCTGTGGTGCCCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGTAGGACTGTAGACAGTGAAACTTGGTACTTCATGGTGAATGTCACAGATGCCATCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATCAACTGGCTGCGGGACGGGGTGCAGCTGGCGGAAAGCAACCGCACCCGCATCACAGGG
                                                                 AGAGAAAAGGAGATTACAGCTTCCCCAGACTACCTGGAGATAGCCATTTACTGCATAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               equals a,t,g,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ω
••
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 1177.2;
Pred. No. 6.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches 631;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2; DB 10;
i.5e-263;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              24; Gaps
                                                                 1425
                                                                                                                                                                        1305
                                                                                                                                                                                                                                                                                 1185
                                                                                                                                                                                                                                                                                                                                    1125
                                                                                                                                                                                                                                                                                                                                                                                        1065
                                                                                                                                                                                                                                                                                                                                                                                                                                           1005
               1485
                                                                                             915
                                                                                                                                                                                                     795
                                                                                                                                                                                                                              1245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       540
                                         975
                                                                                                                                                855
                                                                                                                                                                                                                                                       735
                                                                                                                                                                                                                                                                                                           675
                                                                                                                                                                                                                                                                                                                                                               615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ψ
```

```
2446
                                                                                                                                       1930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1156
     2050
                                      2506
                                                                      1990
                                                                                                                                                                                                     1870
                                                                                                                                                                                                                                      2326
                                                                                                                                                                                                                                                                       1810
                                                                                                                                                                                                                                                                                                      2266
                                                                                                                                                                                                                                                                                                                                       1750
                                                                                                                                                                                                                                                                                                                                                                      2206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1486
                                                                                                                                                                                                                                                                                                                                                                                                       1690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              976
                                                                                                                                                                                                                                                                                                                                                                                                  CGAGATTTAGCAGCCAGAAATGTTTTGGTAACAGAAAACAATGTGATGAAAATAGCAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCACAGAGACCCACCTTCAAGCAGCTGGTGGAAGACCTGGACCGCATCGTGGCCTTGACC
                               TCCCAGAGACCAACGTTCAAGCAGTTGGTAGAAGACTTGGATCGAATTCTCACTCTCACA
                                                              CCCAGTAACTGCACCAACGAGCTGTACATGATGATGCGGGGACTGCTGGCATGCAGTGCCC
                                                                                 CCAGCCAACTGCACCAACCGAACTGTACATGATGAGGGACTGTTGGCATGCAGTGCCC
                                                                                                                                                   GATGTCTGGTCCTTCGGGGTGTTAATGTGGGGAGATCTTCACTTTAGGGGGCCTCGCCCTAC
                                                                                                                                                                                                                                                                   CTTCCAGTCAAGTGGATGGCTCCAGAAGCCCTGTTTGATAGAGTATACACTCATCAGAGT
                                                                                                                                                                                                                                                                                                                                  TTTGGACTCGCCAGAGATATCAACAATATAGACTATTACAAAAAGACCACCAACGAGTGGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCATGCACCTACCAGCTGGCCAGAGGCATGGAGTACTTGGCTTCCCAAAAATGTATTCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAGTACTCCTATGACATTAACCGTGTTCCTGAGGAGCAGATGACCTTCAAGGACTTGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAGTATGCCTCTAAAGGCAACCTCCGAGAATACCTCCGAGCCCGGAGGCCACCCGGGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGAATATCATAAATCTTCTTGGAGCCTGCACACAGGATGGGCCTCTCTATGTCATAGTT 1965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGTATGAACTTCCAGAGGACCCAAAATGGGAGTTTCCAAGAGATAAGCTGACACTGGGC 1725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGAGGATAACAACACGCCTCTCTTCAACGGCAGACACCCCCATGCTGGCAGGGGTCTCC 1665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CGGAGACAGGTAACAGTTTCGGCTGAGTCCAGCTCCTCCATGAACTCCCAACACCCCGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGAAGCCAGACTTCAGCAGCCAGCCGGCTGTGCACAAGCTGACCAAACGTATCCCCCTG 1545
                                                                                                                                 CCCGGTGTGCCTGTGGAGGAACTTTTCAAGCTGCTGAAGGAGGGTCACCGCATGGACAAG
                                                                                                                                                                                                   GATGTGTGGTCTTTCGGGGTGCTCCTGTGGGAGATCTTCACTCTGGGCGGCTCCCCATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAATACTGCTACAACCCCAGCCACAACCCAGAGGAGCAGCTCTCCTCCAAGGACCTGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGTATGCCTCCAAGGGCAACCTGCGGGGGGTACCTGCAGGCCCCGGAGGCCCCCAGGGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAGAATATCATCAACCTGCTGGGGGCCTGCACGCAGGATGGTCCCTTGTATGTCATCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAAGACAAGCCCAAGGAGGCGGTCACCGTGGCCGTGAAGATGTTGAAAGATGATGCCACA 1845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAGTATGAGCTTCCCGAAGACCCCTCGCTGGGAGCTGCCTCGGGACAGACTGGTCTTAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTTCGGCCATCACGGCTCTCCTCCAGT-----GGGACTCCCATGCTAGCAGGGGTCTCT 1209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGCAGACAGGTAACAGTGTCTGCTGACTCCAGTGCATCCATGAACTCTGGGGTTCTTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAGAAGAGTGACTTCCACAGCCAGATGGCTGTGCACAAGCTGGCCAAGAGCATCCCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCCTTCCTCATCTCCTGCATGGTGGGGTCGGTCATCGTCTACAAGATGAAGAGTGGTACC
                                                                                                                                                                                                                                                                                                                                  1809
                                                                                                                                 1989
                                                                                                                                                                                                 1929
                                                                                                                                                                                                                                                                   1869
                                                                                                                                                                                                                                                                                                  2325
                                                                                                                                                                                                                                                                                                                                                                                                                                  2205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1035
 2109
                                                                 2049
```

밁 Ş 밁 δ B Ş 밁 Qy В Ş 밁 õ 망 δ 멍 Q 밁 δÃ В Ş В δ 밁 γO g Qy В γ B δÃ 밁 Š 밁 δÃ 밁 Š В

```
FEATURE:

NAME/KEY: misc_feature

OTHER INFORMATION: Incyte ID No. US

NAME/KEY: unsure

LOCATION: 2, 9, 16, 39, 42, 68, 14:

OTHER INFORMATION: a, t, c, g, or of US-10-044-090-48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Olga Bandman
TITLE OF INVENTION: GENES DIFFERENTIALLY EXP
FILE REFERENCE: PA-0028 US
CURRENT APPLICATION NUMBER: US/10/044,090
CURRENT FILING DATE: 2002-01-09
NUMBER OF SEQ ID NOS: 850
SOFTWARE: PERL Program
SEQ ID NO 48
LENGTH: 3454
TYPE: DNA
ORGANISM: HOMO Sapiens
 밁
                  Qy
                                              밁
                                                                     δõ
                                                                                                  В
                                                                                                                     γQ
                                                                                                                                                     밁
                                                                                                                                                                           Qy
                                                                                                                                                                                                       밁
                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-044-090-48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 48, Application U Patent No. US20020137081A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 1495; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2566
 664
                                                                                                                                                     484
                                                                                                                                                                                                        424
                                                                                                                            967
                                                                                                                                                                                                                                847
                                                                                                                                                                                                                                                         364
                                                                                                                                                                                                                                                                                                           304
                                                                                                                                                                                                                                                                                                                                    727
                                                                                                                                                                                                                                                                                                                                                              244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCAATGAGGAATACTTGGACCTCAGCCAACCTCTCGAACAGTATTCACCTAGTTACCCT
                                                                                                AGAGCACCATACTGGACCAACACAGAAAAGATGGAAAAGCGGCTCCATGCTGTGCCTGCG
                                                                                                                                                                                                                                                                                                                                                                                   GATGATGAGGATGACACCGATGGTGCGGAAGATTTTGTCAGTGAGAACAGTAACAACAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGAGACGTAGAGTTTGTCTGCAAGGTTTACAGTGATGCCCAGCCCCACATCCAGTGGATC
                                              GCCACCTGGAGCATAATGGACTCTGTGGTGCCCTCTGACAAGGGCAACTACACCTGC
                                                                                                                                                                                                                 CTGAAAAACGGGAAGGAGTTTAAGCAGGAGCATCGCATTGGAGGCTACAAGGTACGAAAC
                                                                                                                                                                                                                                                                       GCCAACACTGTCAAGTTTCGCTGCCCAGCCGGGGGGGAACCCAATGCCAACCATGCGGTGG
                                                                                                                                                                         CAGCACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCTGACAAGGGAAATTATACCTGT
                                                                                                                                                                                                     TTGAAAAATGGCAAAGAATTCAAACCTGACCACAGAATTGGAGGCTACAAGGTCCGTTAT
                                                                                                                                                                                                                                                        GCCAAGACAGTGAAGTTCAAATGCCCTTCCAGTGGGACCCCAAACCCCCACACTGCGCTGG
                                                                                                                                                                                                                                                                                                        GATGATGATGATGACTCCTCTTCANAGGAGAAAGAAACAGATAACACCAAACCCAAACCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCTTACGAACCATGCCTTCCTCAGTATCCACACATAAACGGCAGTG
AGCAACGTGGAGTTCATGTGTAAGGTGTACAGTGACCCGCAGCCGCACATCCAGTGGCTA
                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                          26.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US/10044090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DIFFERENTIALLY EXPRESSED
                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                            Score 1130; DB 12;
Pred. No. 5.4e-252;
0; Mismatches 561;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             143, 268
or other
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US20020137081A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  493848CB1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Z
                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VASCULAR
                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TISSUE ACTIVATION
                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                         1086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2682
                                                663
                                                                                                                                                                             966
                                                                                                                                                                                                                                                                               846
                                                                                                                                                                                                                                                                                                                                                            303
                                                                                                                                                    543
                                                                                                                                                                                                     483
                                                                                                                                                                                                                             906
                                                                                                                                                                                                                                                        423
                                                                                                                                                                                                                                                                                                                                                                                                            2
```

```
1738
                                                                                                                                                     1558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1144
                        2167
                                                 1678
                                                                                                   1618
                                                                                                                            2047
                                                                                                                                                                                                      1498
                                                                                                                                                                                                                             1927
                                                                                                                                                                                                                                                      1438
                                                                                                                                                                                                                                                                                                        1378
                                                                                                                                                                                                                                                                                                                               1807
                                                                                                                                                                                                                                                                                                                                                        1318
                                                                                                                                                                                                                                                                                                                                                                                 1747
                                                                                                                                                                                                                                                                                                                                                                                                        1258
                                                                                                                                                                                                                                                                                                                                                                                                                                 1687
                                                                                                                                                                                                                                                                                                                                                                                                                                                          1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1147
                                                                                                                                                                             1987
                                                                                                                                                                                                                                                                               1867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                724
             GTTTTGGTAACAGAAAACAATGTGATGAAAATAGCAGACTTTGGACTCGCCAGAGATATC
                                                                                               CTGCGGGAGTACCTGCAGGCCCGGAGGCCCCCAGGGCTTGGAATACTGCTACAACCCCAGC
                                                                                                                                                                CTCCGAGAATACCTCCGAGCCCGGAGGCCACCCGGGATGGAGTACTCCTATGACATTAAC
                                                                                                                                                                                                  GTCACCGTGGCCGTGAAGATGTTGAAAGATGATGCCACAGAGAAAGACCTTTCTGATCTG
                                                                                                                                                                                                                                                                                                                                                                      TTTGGGCAAGTGGTCATGGCGGAAGCAGTGGGAATTGACAAAGACAAGCCCAAGGAGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                     CCAAAATGGGAGTTTCCAAGAGATAAGCTGACACTGGGCAAGCCCCTGGGAGAAGGTTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCTGACTCCAGTGCATCCATGAACTCTGGGGTTCTTCTGGTTCGGCCATCACGGCTC---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCCCAGACTACCTGGAGATAGCCATTTACTGCATAGGGGTCTTCTTAATCGCCTGTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CATCACTCTGCATGGTTGACCGTTCTGGAAGCCCTGGAAGAGGGCCGGCAGTGATGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTTCACTCTGCATGGTTGACAGTTCTGCCAGCGCCTGGAAGAGAAAAGGAGATTACAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGCACATCGAGGTGAATGGGAGCAAGATTGGCCCCAGACCTGCCTTATGTCCAGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAGCACGTGGAAAAGAACGGCAGTAAATACGGGCCCGACGGGCTGCCCTACCTCAAGGTT
GTCCTGGTGACAGAGGACAATGTGATGAAGATAGCAGACTTTGGCCTCGCACGGGACATT
                                                            AGAGGCATGGAGTACTTGGCTTCCCAAAAATGTATTCATCGAGAGTTTAGCAGCCAGAAAT
                                                                                                                                                                                                                                                                  GTGTCAGAGATGGAGATGATGAAGATGATTGGGAAACACAGAATATCATAAATCTTTTT
                                                                                                                                                                                                                                                                                                      ACCAAAGTGGCTGTGAAGATGTTGAAGTCGGACGCAACAGAGAAAGACTTGTCAGACCTG
                                                                                                                                                                                                                                                                                                                                                                                                       CCTCGCTGGGAGCTGCCTCGGGACAGACTGGTCTTAGGCAAACCCCTGGGAGAGGGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCTGAGTCCAGCTCCTCCATGAACTCCAACACCCCGCTGGTGAGGATAACAACACGCCTC
                                                CGAGGCATGGAGTATCTGGCCTCCAAGAAGTGCATACACCGAGACCTGGCAGCCAGGAAT
                                                                                                                                                                                                                                                                                                                                                      TTTGGGCAGGTGGTGTTGGCAGAGGCTATCGGGCTGGACAAGGACAAACCCAACCGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCGCCCCTGTACCTGGAGATCATCATCTATTGCACAGGGGCCTTCCTCATCTCCTGCATG
                                                                                                                                                                                                                                                                             1926
                                                                                                 1677
                                                                                                                          2106
                                                                                                                                                   1617
                                                                                                                                                                            2046
                                                                                                                                                                                                     1557
                                                                                                                                                                                                                            1986
                                                                                                                                                                                                                                                     1497
                                                                                                                                                                                                                                                                                                      1437
                                                                                                                                                                                                                                                                                                                             1866
                                                                                                                                                                                                                                                                                                                                                        1377
                                                                                                                                                                                                                                                                                                                                                                              1806
                                                                                                                                                                                                                                                                                                                                                                                                       1317
                                                                                                                                                                                                                                                                                                                                                                                                                               1746
                                                                                                                                                                                                                                                                                                                                                                                                                                                         1257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1686
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              843
```

밁 ş 문 δ g Ş В Ş 밁 δ Db Ş g ð В ő 망 Ş 밁 á В Q В Ş 밁 Ş рь Ş 밁 Ş 밁 ð В ν В 5

```
FILE REFERENCE: 44921-5038-US
CURRENT APPLICATION NUMBER: US/99/917,800A
CURRENT FILING DATE: 2001-07-31
PRIOR APPLICATION NUMBER: US 60/222,040
PRIOR FILING DATE: 2000-07-31
PRIOR FILING DATE: 2000-11-02
PRIOR FILING DATE: 2000-11-02
PRIOR APPLICATION NUMBER: US 60/290,029
PRIOR FILING DATE: 2001-05-11
PRIOR APPLICATION NUMBER: US 60/290,645
PRIOR FILING DATE: 2001-05-15
PRIOR FILING DATE: 2001-05-16
PRIOR APPLICATION NUMBER: US 60/292,336
PRIOR FILING DATE: 2001-05-22
PRIOR APPLICATION NUMBER: US 60/292,336
PRIOR APPLICATION NUMBER: US 60/295,798
PRIOR APPLICATION NUMBER: US 60/297,457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 5
US-09-917-800A-1466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1466, Application Patent No. US20020119462A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Mendrick, Donna
APPLICANT: Porter, Mark
APPLICANT: Johnson, Kory
APPLICANT: Castle, Arthur
APPLICANT: Elashoff, Michael
APPLICANT: Gene Logic, Inc.
TITLE OF INVENTION: Molecular Toxicology Modeling
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGTACATGATGATGAGGACTGTTGGCATGCAGTGCCCTCCCAGAGACCCAACGTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGTATCCACACATAAACGGCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCTTCAGGAGATGATTCTGTTTTTTCTCCAGACCCCATGCCTTACGAACCATGCCTTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGTTGGTAGAAGACTTGGATCGAATTCTCACTCTCACAACCAATGAGGAATACTTGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTAATGTGGGAGATCTTCACTTTAGGGGGCTCGCCCTACCCAGGGATTCCCCGTGGAGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCAGAAGCCCTGTTTGATAGAGTATACACTCATCAGAGTGATGTCTGGGTCCTTCGGGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AACAATATAGACTATTACAAAAAGACCACCAATGGGCGGCTTCCAGGTCAAGTGGATGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGACACCCAGCCCAGCTTGCCAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTCAGCCAACCTCTCGAACAGTATTCACCTAGTTACCCTGACACAGAAGAAGTTCT----TGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGCTGGTGGAAGACCTGGACCGCATCGTGGGCTTGACCTCCAACCAGGAGTACCTGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTCCTGTGGGAGATCTTCACTCTGGGCGGCTCCCCATACCCCGGTGTGCCTGTGGAGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CACCACATCGACTACTATAAAAAGACAACCAACGGCCGACTGCCTGTGAAGTGGATGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGTCCATGCCCCTGGACCAGTACTCCCCCAGCTTTCCCGACACCCGGAGCTCTACGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US/09917800A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2346
```

```
Š
                                          В
                                                              γ
                                                                                           밁
                                                                                                              Qy
                                                                                                                                              밁
                                                                                                                                                                  VΩ
                                                                                                                                                                                            밁
                                                                                                                                                                                                                     δÃ
                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                           γO
                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                             οy
                                                                                                                                                                                                                                                                                                                                                                                                      멍
                                                                                                                                                                                                                                                                                                                                                                                                                                Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δÕ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -09-917-800A-1466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM: Rattus norvegicus FEATURE:
OTHER INFORMATION: Genbank
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 1451
TYPE: DNA
                 1625
                                                                                                                      1505
                                                                                                                                                                                                                            1385
                                                                                                                                                                                                                                                                             1325
                                                                                                                                                                                                                                                                                                                                                                                   1205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1025
                                                                                                                                                                                                                                                                                                       582
                                                                                                                                                761
                                                                                                                                                                                                  701
                                                                                                                                                                                                                                                    642
                                                                                                                                                                                                                                                                                                                                                         522
                                                                                                                                                                                                                                                                                                                                                                                                             462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA
TCTCTTCAACGGCAGACACCCCCCATGCTGGCAGGGGTCTCCGAGTATGAACTTCCAGAGG
                                                                                                                                                                                            CTTCCCCAGACTACCTGGAGATAGCCATTTACTGCATAGGGGTCTTCTTAATCGCCTGTA 1444
                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGCTGACTCTAGTGCATCCATGAACTCTGGGGTTCACCTGGTTTAGCCTTCATAA----
                                                      CGGCTGAGTCCAGCTCCATGAACTCCAACACCCCGCTGGTGAGGATAACAACACGCC
                                                                                                       GCCAGCCGGCTGTGCACAAGCTGACCAAACGTATCCCCCTGCGGAGACAGGTAACAGTTT
                                                                                                                                                         TGGTGGTAACAGTCATCCTGTGCCGAATGAAGAACACGACCAAGAAGCCAGACTTCAGCA 1504
                                                                                                                                                                                                                                               CCTTTCACTCTGCATGGTTGACAGTTCTGCCAGCGCCTGGAAGAGAAAAGGAGATTACAG 138
                                                                                                                                                                                                                                                                                                                ATGTAACTTTTGAGGACGCTGGGGAATATACGTGCTTGGCGGGTAATTCTAFTGGGATAT 1324
                                                                                                                                                                                                                                                                                                                                                                   TTCTCAAGGCCGCCGGTGTTAACACCACGGACAAAGAGATTGAGGTTCTCTATATTCGGA 1264
                                                                                                                                                                                                                                                                                                                                                                                                                      TCAAGCACGTGGAAAAGAACGGCAGTAAATACGGGCCCGACGGCTGCCCTACCTCAAGG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGCCAAGACGGTGAAGTTCAAATGCCTGTCGAGCGGGACACCCCAGCCCCACTTTGCGCT 161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGGCCAACACTGTCAAGTTTCGCTGCCCAGCCGGGGGGAACCCAATGCCAACCATGCGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGAGAGCACCATACTGGACCAACACAGAAAAGATGGAAAAGCGGCTCCATGCTGTGCCTG 784
                                                                                          GCCAGATGGCTGTGCATAAACTGGCTAAGAGCACCCTTCTGTGCAGACAGGTAACAGTGT
                                                                                                                                           TGCTGGGGTCGTCGTCATCTACAAGATGAAAAGCGGCATCAAGAAGAGCGACTTCCATA
                                                                                                                                                                                                                                                                                                    ATGTCTCCTTTGAGGATGCAGGAGGGTATACGTGCTTGGCAGGTAACTCTATTGGACTCT
                                                                                                                                                                                                                                                                                                                                                       TCCTGAAGACTGCTGGAGTTAATACCACCGACAAGGAAATGGAGGTGCTTCATCTACGGA
                                                                                                                                                                                                                                                                                                                                                                                                         TGAAGCACATCAAGATGAACGGGAGTAAGATTGGTCCAGACAGCTTGCCATATGTCCAGA 521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGTGGTGGAGAATGAATACGGGTCCATCAATCACACGTACCACCTGGATGTTGTGGAGC 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCAGCACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCTGACAAGGGAAATTATACCT 964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGCTGAAAAACGGGAAGGAGTTTAAGCAGGAGCATCGCATTGGAGGCTACAAGGTACGAA 90/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATGCCACTTGGAGCATCATAGTGGACTCTGTGGTGCCTTTCAACAAGGGCAACTACACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGCGCCCGCCATACTGGACATCCCCAGAAAAAATGGAGAGGAAACTGCACGCAGTGCCAG 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGTTGAAGAATGGCAAGGAATTCAAACCTGACCACTGAATTGGAGGCTACAAGGTTCATT 221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Genbank Accession No. US20020119462A1 U58466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 662.2; DB 10;
Pred. No. 8.4e-144;
0; Mismatches 443;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1451;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                  1564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1084
                                                                                        880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ψ
```

```
Sequence 1, Application US/09814950

Patent No. US2020137130A1

GENERAL INFORMATION:

APPLICANT: WEI, Ming-Hui et al

TITLE OF INVENTION: ISOLATED HUMAN SECRETED PROTITLE OF INVENTION: USES THEREOF

TITLE OF INVENTION: USES THEREOF

FILE REFERENCE: CL001174

CURRENT APPLICATION NUMBER: US/09/814,950

CURRENT APPLICATION NUMBER: US/09/814,950

CURRENT FILING DATE: 2001-03-23

NUMBER OF SEO ID NOS: 4

SOFTWARE: FastSEQ for Windows Version 4.0

SEO ID NO 1

LENGTH: 848

TYPE: DNA

ORGANISM: Human

US-09-814-950-1
                       Š
                                                            밁
                                                                                         Qy
                                                                                                                                  뮹
                                                                                                                                                                    QΥ
                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                        QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ρ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VΩ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-814-950-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                       Best Loc
Matches
                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1113
                                                                                                                                                                       146
                                                                                                                                      62
                                                                                                                                                                                                                                                  86
                                                                                                                                                                                                                                                                                     Local Similarity
nes 643; Conserv
                                                                                                                                                                                                              Ν
                                                      GAAGTGTGCAGATGGGATTAACGTCCACATGGAGATATGGAAGAGGACCGGGGATTGGTA
                                                                                                                                                                                                                              GGGACAACACAGGTCGCGGAGGAGCGTTGCCATTCAAGTGACTGCAGCAGCAGCAGCGGCAGC
CCGTAACCATGGTCAGCTGGGGTCGTTTCATCTGCCTGGTCGTGGTCACCATGGCAACCT
                                                                                                                                                    GCCTCGGTTCCTGAGCCCACCGCAGGCTGAAGGCATTGCGCGTAGTCCATGCCCGTAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCTGGGGCATGGAGTATCTTGCCTCAAAGAAGTTTATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCAGAGGCATGGAGTACTTGGCTTCCCAAAAATGTATTC
                                                                                                                                  GCCTCGGTTCCTGAGCCCACCGCAGGCTGAAGGCATTGCGCGTAGTCCATGCCCGTAGAG
                                                                                                                                                                                                           GGGACAACACAGGTCGCGGAGGAGCGTTGCCATTCAAGTGACTGCAGCAGCAGCGGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCGTGTTCCTGAGGAGCAGATGACCTTCAAGGACTTGGTGTCATGCACCTACCAGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATCTTTGGGAGTATCTGCAGGCCCGGAGGCCTCCTGGGCTGGAGTATTGCTACAGCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGGGGGTGTGCACCCAGGATGATTCCCTCTATGTCATCGTGGATTATGCCCCCAAAGGCA 1292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTGGAGCCTGCACACAGGATGGGCCTCTCTATGTCATAGTTGAGTATGCCTCTAAAGGCA 1984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGGTGTCAGAGATGGAGATGATGAAGATGATTGGGAAACACAAGAATATCATAAATCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGACCAAAGTGGCAGAGAAGATGTTGAAGTCTAATGAAACAGAGAAGGACCTGTCAGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGGTCACCGTGGCCGTGAAGATGTTGAAAGATGATGCCACAGAGAAAAGACCTTTCTGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCTTCGGGCAGGTGGTATTGGCCAAAGCCATCGGTCTGGATAAGGACAAACCCAACCGCA 1112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCTTTGGGCAAGTGGTCATGGCGGAAGCAGTGGGAATTGACAAAGAAGAAGCCCAAGGAGG 1804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATCCCTGCTGGGAGCTGCCCCGAGACAGACTGGTCTTAAGAAAACCGCTTGGCAAGG---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCCACAACCCCGAGGAACAGCTGTCTTCCAAAGATCTGGTGTCCTGTGCCTATCAAGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCTCCGAGAATACCTCCGAGCCCGGAGGCCACCCGGGATGGAGTACTCCTATGACATTA 2044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCCAAAATGGGAGTTTCCAAGAGATAAGCTGACACTGGGCAAGCCCCTGGGAGAAGGTT 1744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -CTCTCCTCCAGTGGGACCCCCCATGCTAGCTGGTGTCTCTGAATATGACCTCCCTGAAG
                                                                                                                                                                                                                                                                                   15.1%; Score 643; DB 10; ilarity 100.0%; Pred. No. 1.8e-139; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PROTEINS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2143
                                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HUMAN SECRETED PROTEINS,
                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1172
                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1864
                                                          181
                                                                                             265
                                                                                                                                  121
                                                                                                                                                                                                                                                                                   0
```

```
RESULT 7
US-09-728-952-82
; Sequence 82, Application
; Patent No. US20020111302A
 밁
                 ô
                                        В
                                                         δ
                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           а
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                     APPLICANT: Yamazaki, Vicki
APPLICANT: Ujwal, Manusha L.
APPLICANT: Dimanac, Radoje T.
TITLE OF INVENTION: No. US20020111302A1el Nu
TITLE OF INVENTION: Polypeptides
FILE REFERENCE: 799
CURRENT APPLICATION UMBER: US/09/728,952
CURRENT FILING DATE: 2000-11-30
NUMBER OF SEQ ID NOS: 101
                                                                                                                                                                                     NUMBL..
SOFTWARE: PL_F
SEQ ID NO 82
FRIGTH: 2184
                                                                                                                                                                                                                                                                                                                               APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                 Query Match
Best Local S
Matches 836
                                                                                                                          ORGANISM: Homo sapiens FEATURE: NAME/KEY: CDS LOCATION: (40)..(2124) IS-09-728-952-82
                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                               LENGTH: 21
TYPE: DNA
 1023
                     1614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       182
                                                                                  Local Similarity
les 836; Conserva
                                      CGCAAGGCTGTCCTCA-----
            AACAACACGCCTCTTTCAACGGCAGACACCCCCCATGCTGGCAGGGGGTCTCCCGAGTATGA 1673
                                                                                                                                                                                                                                                                                                                                                                                               INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGTACTTCATGGTGAATGTCACAGATGCCATCTCATCCGGAGATGATGAGGATGACACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACTTGGGGCCCAACAATAGGACAGTGCTTATTGGGGAGTACTTGCAGATAAAGGGCGCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CACCAACCAAATACCAAATCTCTCAACCAGAAGTGTACGTGGCTGCGCCAGGGGAGTCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGTCCCTGGCCCGGCCCTCCTTCAGTTTAGTTGAGGATACCACATTAGAGCCAGAAGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGTCCCTGGCCCGGCCCTCCTTCAGTTTAGTTGAGGATACCACATTAGAGCCAGAAGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGTACTTCATGGTGAATGTCACAGATGCCATCTCATCCGGAGATGATGAGGATGACACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCGTAACCATGGTCAGCTGGGGTCGTTTCATCTGCCTGGTCGTCGTCACCATGGCAACCT
                                                                                                                                                                                                                                                                                                                                                                                                         US20020111302A1
                                                                                                                                                                                                                                                                                                          Tang, Y. Tom
Zhou, Ping
Goodrich, Ryle
Liu, Chenghua
Asundi, Vinod
Wang, Jian-Rui
Wang, Dunrui
Yamazaki, Vicki
                                                                                                                                                                                                             pt_FL_genes Version 2.0
                                                                                 Conservative
                                                                                           15.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                   US/09728952
-GGGGAGGGCCCACGCTGGCCAATGTCTCCGAGCTCGA
                                                                                Score 640.6; DB 10;
pred. No. 1e-138;
0; Mismatches 299;
                                                                                                                                                                                                                                                                               Nucleic
                                                                                                                                                                                                                                                                               Acids
                                                                                  Indels
                                                                                                     Length
                                                                                                       2184
                                                                                 6,
                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
 1076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                 1.
```

```
밁
                   Š
                                        B
                                                               δÃ
                                                                                          밁
                                                                                                            γ
                                                                                                                                         망
                                                                                                                                                              Š
                                                                                                                                                                                        밁
                                                                                                                                                                                                          δõ
                                                                                                                                                                                                                                       망
                                                                                                                                                                                                                                                          δõ
                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                      δõ
                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                DЪ
                                                                                                                                                                                                                                                                                                                                                                                                   Q
                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                  δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           몽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ρy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1674
                                                                                                                                                                                                                 2454
                                                                                                                                                                                                                                                                                                                                      1677
                                                                                                                                                                                                                                                                                                                                                                                   1617
                                                                                                                                                                                                                                                                                                                                                                                                                                 1557
                                                                                                                                                                                                                                                                                                                                                                                                                                                       2154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1854
                                                                                                                                           1917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGCACCAACGAACTGTACATGATGATGAGGGACTGTTGGCATGCAGTGCCCTCCCAGAG
                                                                                                                                                                                                                                                                                   GTCCTTCGGGGTGTTAATGTGGGAGATCTTCACTTTAGGGGGCTCGCCCTACCCAGGAT
                                                                                                                                                                                                                                                                                                                                   CGCCAGAGATATCAACAATATAGACTATTACAAAAAGACCACCAATGGGCGGCTTCCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACTTCCAGAGGACCCAAAATGGGAGTTTCCAAGAGATAAGCTGACACTGGGCAAGCCCCT 1733
                                                                                                                                                                                                                                       CCCTGTGGAGGAGCTCTTCAAGCTGCTGAAGGAGGGCCACCGCATGGACAAGCCCGCCAA
                                                                                                                                                                                                                                                  AGCAGCCAGAAATGTTTTGGTAACAGAAAACAATGTGATGAAAATAGCAGACTTTGGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTACCAGCTGGCCAGAGGCATGGAGTACTTGGCTTCCCAAAAATGTATTCATCGAGATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTATGACATTAACCGTGTTCCTGAGGAGCAGATGACCTTCAAGGACTTGGTGTCATGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGCCAAGGGTAACCTGCGGGAGTTTCTGCGGGCGCGGCGGCCCCCGGGCCTGGACTACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTCTAAAGGCAACCTCCGAGAATACCTCCGAGCCCGGAGGCCACCCGGGATGGAGTACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCCCAAGGAGGCGGTCACCGTGGCCGTGAAGATGTTGAAAGATGATGCCACAGAGAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGGAGAAGGTTGCTTTGGGCAAGTGGTCATGGCGGAAGCAGTGGGAATTGACAAAGACAA 1793
A 2097
                       A 2694
                                                           AAGTTCTTGTTCTCAGGAGATGATTCTGTTTTTTTCTCCAGACCCCATGCCTTACGAACC
                                                                                                      GGAATACTTGGACCTCAGCCAACCTCTCGAACAGTATTCACCTAGTTACCCTGACACAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTACCAGGTGGCCCGGGGCATGGAGTACTTGGCCCTCCCAGAAGTGCATCCACAGGGACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTTCGACACCTGCAAGCCGCCCGAGGAGCAGCTCACCTTCAAGGACCTGGTGTCCTGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCTTTCTGATCTGGTGTCAGAGATGGAGGATGATGAAGATGATTGGGAAACACAAGAATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGCCGCCAAGCCTGTCACCGTAGCCGTGAAGATGCTGAAAGACGATGCCACTGACAAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCTGCCTGCCGACCCCAAATGGGAGCTGTCTCGGGCCCGGCTGACCCCTGGGCAAGCCCCT
                                             CAGCTCCAGCTCCTCAGGGGACGACTCCGTGTTTGCCCCACGACCTGCTGCCCCGGCCCC
                                                                                            CGAGTACCTGGACCTGTCGGCGCCTTTCGAGCAGTACTCCCCGGGTGGCCAGGACACCCC
                                                                                                                                          GCCCACCTTCAAGCAGCTGGTGGAGGACCTGGACCGTGTCCTTACCGTGACGTCCACCGA
                                                                                                                                                     ACCAACGTTCAAGCAGTTGGTAGAAGACTTGGATCGAATTCTCACTCTCACAACGAATGA
                                                                                                                                                                                                                                                                                                                                                                                   GGCTGCCCGCAATGTGCTGGTGACCGAGGACAACGTGATGAAGATCGCAGACTTCGGGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGGGGAGGCTGCTTCGGCCAGGTGGTCATGGCGGAGGCCATCGGCATTGACAAGGACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1853
                                                                                                                                         1976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1196
                                               2096
                                                                     2693
                                                                                            2036
                                                                                                                                                                2573
                                                                                                                                                                                         1916
                                                                                                                                                                                                                                       1856
                                                                                                                                                                                                                                                              2453
                                                                                                                                                                                                                                                                                                            2393
                                                                                                                                                                                                                                                                                                                                     1736
                                                                                                                                                                                                                                                                                                                                                                                   1676
                                                                                                                                                                                                                                                                                                                                                                                                        2273
                                                                                                                                                                                                                                                                                                                                                                                                                                 1616
                                                                                                                                                                                                                                                                                                                                                                                                                                                       2213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1376
                                                                                                                                                                                                               2513
```

```
PATENT NO. US2002013237A1

GENERAL INFORMATION:
APPLICANT: AGIACE, Paul A.
APPLICANT: Jones, Robert
APPLICANT: Jones, Robert
APPLICANT: Harlocker, Susan L.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THE
TITLE OF INVENTION: AND DIAGNOSIS OF OVARIAN CANCER
FILE REFERENCE: 210121.497
CURRENT APPLICATION NUMBER: US/09/867,701
CURRENT APPLICATION NUMBER: US/09/867,701
CURRENT FILING DATE: 2001-05-29
NUMBER OF SEQ ID NOS: 10912
SOFTMARE: FastSEQ for Windows Version 4.0
SEQ ID NO 4969
LENGTH: 514
                                                                                                                                                                                  DЪ
                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                  Qy
                                                                                       US-09-895-828-380
                                                                                                                                                         δÃ
                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                             Š
                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                           Š
                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; TYPE: DNA
; ORGANISM: Homo sapien
US-09-867-701-4969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-867-701-4969/c
      Sequence 380, Application US/09895828
Patent No. US20020099012A1
GENERAL INFORMATION:
APPLICANT: Wang, Tongtong
APPLICANT: Wang, Tongtong
APPLICANT: Watenabe, Yoshihiro
APPLICANT: Watenabe, Yoshihiro
APPLICANT: Carter, Darrick
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 11.8%;
Best Local Similarity 98.6%;
Matches 507; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 4969, Application US/09867701
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                 3102
                                                                                                                                                                                                                                                                                                    3162
                                                                                                                                                                                                                                                                                                                                                                                            3042
                                                                                                                                                                                                                                                                                                                                                                                                                                          2982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         274
                                                                                                                                                                                                                                154
                                                                                                                                                                                                                                                                             214
                                                                                                                                                                                                                                                                                                                                                                                                                    394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 454
                                                                                                                                                                                   94
                                                                                                                                      34
                                                                                                                                 CGTTAATTTATTAATAAATTGGTAATATACAAAA 3375
                                                                                                                                                                                                                                                                       TRATATATTTACAAGGAGTTATTTTTTGTATTGATTTTAAATGGATGTCCCAATGCACCT 3221
                                                                                                                                                                                                                                                                                                                   TCTTAATTTTCACCGAGCAGAGGTGGAAAAATACTTTTGCTTTTCAGGGAAAATGGTATAA 3341
                                                                                                                                                                                                                           CCAGGAGGAGAAGAAGGTTTCTGGAGCAGTGGACTGCCACAAGCCACCATGTAACCCCTC
                                                                                                                                                                              TCTTAATTTTCACCGAGCAGAGGTGGAAAAATACTTTTGCTTTCAGGGAAAATGGTATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCAGGAGGAGAAGAAGGTTTCTGGAGCAGTGGACTGCCACAAGCCACCATGTAACCCCTC

 Mismatches

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 502.8; DB 10
Pred. No. 4.2e-107;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 THERAPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                514;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                              395
                                                                                                                                                                                                                           95
                                                                                                                                                                                                                                                                                                                                                                                                                                       3041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2981
                                                                                                                                                                                                                                                                                                                                                                                                                 335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                        Вp
                                                                                                                                                                                                                                                                                            Š
                                                                                                                                                                                                                                                                                                                   Д
                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                  DЬ
                                                                                                                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Š
    LENGTH: 446
                                                                                                                                                                                                                                                                                              3825
                                                                                                                                                                                                                                                                                                                                            3766
                                                                                                                                                                                                                                                                                                                                                                                         3706
                                                                                                                                                                                                                                                                                                                                                                                                                                       3646
                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                181
```

```
SEQ ID NO 380

LENGTH: 458

TYPE: DNA

ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: misc_feature
LOCATION: 371
OTHER INFORMATION: n = A.
US-09-895-828-380
                                                                                                                                                                                                                                                                                                   RESULT 10
US-09-867-701-9869/c
                                       APPLICANT: Aglate, Paul A.
APPLICANT: Jones, Robert
APPLICANT: Harlocker, Susan L.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
TITLE OF INVENTION: AND DIAGNOSIS OF OVARIAN CANCER
FILE REFERENCE: 210121.497
CURRENT APPLICATION NUMBER: US/09/867,701
CURRENT FILING DATE: 2001-05-29
NUMBER OF SEQ ID NOS: 10912
                                                                                                                                                                                                                                   Sequence 9869, Application US/09867701 Patent No. US20020132237A1 GENERAL INFORMATION:
SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 9869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches 454;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 10.18;
Best Local Similarity 99.38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Kalos, Michael D.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.539
CURRENT APPLICATION NUMBER: US/09/895,828
CURRENT FILING DATE: 2001-06-28
NUMBER OF SEQ ID NOS: 473
SOFTWARE: FASLSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3526 GAAGTTITGATTTATTTGTGTTTAAATGCTGCTGTCAGACGATGTTGTTCTTAGACCTCCTA 3585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61 GAAGTTTTGATTTATTTGTGTTTAAATGCTGCTGTCAGACGATTGTTCTTAGACCTCCTA 120
                                                                                                                                                                                                                                                                                                                                                                                   TTAAAAGATGCCTTAATCCATTCCTTGAGGACAGACCTTAGTTGAAATGATAGCAGAATG 3765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTCATTACGTCAACGCAACGTCTAACTGGACTTCCCAAGATAAATGGTACCAGGGTCCTC 3705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTCTCTTCAGTGAATTTTGATAATGGCTTCCAGACTCTTT-GCGTTGGAGACGCCTGTT 3883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGCTTCTCTCGGCAGCTGGCCTTCTGCTTCTGAGTTGCACATTAATCAGATTAGCCTG- 3824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTCTCTTCANTGAATTTTGATAATGGCTTCCAGACTCTTTGGCGTTGGAGACGCCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGCTTCTCTGGCAGCTGGCCTTCTGCTTCTGAGTTGCACATTAATCAGATTAGCCTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Α,Τ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 432; DB 10
Pred. No. 1e-90;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 10; Length 458;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                THERAPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       420
```

?:

```
APPLICANT: Warren, Wesley C.
APPLICANT: Tao, Nengbing
APPLICANT: Byatt, John C.
APPLICANT: Mathialagan, Nagappan
TITLE OF INVENTION: NUCLEIC ACID AND OTHER MOLECULES ASSOCIATED WITH LACTATION AND
TITLE OF INVENTION: MUSCLE AND FAT DEPOSITION
FILE REFERENCE: 16511.006/37-21(10298)C
CURRENT APPLICATION NUMBER: US/09/960,352
CURRENT FILING DATE: 2001-09-24
NUMBER OF SEQ ID NOS: 15112
SEQ ID NO 6996
LENGTH: 422
TYPE: DNA
ORGANISM: BOS taurus
OTHER INFORMATION: Clone ID: 30-LIB3058-041-01-K1-H9
US-09-960-352-6996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 11
US-09-960-352-6996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; NAME/KEY: mlsc_feature
; LOCATION: (1)...(446)
; OTHER INFORMATION: n =
US-09-867-701-9869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                           Ş
                                                              밁
                                                                                          Š
   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 6996, Application US/09960352 Patent No. US20020137139A1 GENERAL INFORMATION:
                                                                                                                                        Query Match 7.5%;
Best Local Similarity 90.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3035
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2253 CACCAATGGGCGGCTTCCAGTCAAGTGGATGGCTCCAGAAGCCCTGTTTGATAGAGTATA 2312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      160
   95
                                                              35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              40
GGTATAACGTTAATTATTAATAAATTGGTAATATACAAA 3374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CATAATTTCTTAATTTTCACCGAGCAGAGGTGGAAAAATACTTTTGCTTTCAGGGAAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATATATATATATATATTACAAGGAGTTATTTTTTTTTGTATTTTAAAATGGATGTCCCAA 3214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGAGCACAAATGCAGTATATAGGTGCTGGATGTATGTAAATATTTCAAATTATGTATAA 3154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTCGCAGGGCCGACTTCCGGTCAAGTGGATGGCTCCCGAAGCCCTTTTCGACAGAGTGTA 94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CATAATTTCTTAATTTTCACCGAGCAGAGGTGGAAAAATACTTTTTGCTTTCAGGGAAAAT 3334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTCTGCCTTCCTTGTTAATTTTGTAATAATTGGAGAAGATTTATGTCAGCACACACTTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATATATATATATATTACAAGGAGTTATTTTTTTTTTTAATTGATTTTAAATGGATGTCCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGAGCACAAATGCAGTATATAGGTGCTGGATGTATGTAAATATTCAAATTATGTATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9.28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A, T, C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     or,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 394.2; DB 10;
Pred. No. 5.7e-82;
0; Mismatches 4;
                                                                                                                                          Score 319.4; DB 1
Pred. No. 1.2e-64;
                                                                                                                                                          DB 10; Length 422;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4; Indels
                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                            1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              281
```

```
Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Вр
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Вþ
                                                                                                              δô
                                                                                                                                                         밁
                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-895-828-446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-895-828-446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILE REFERENCE: 210121.539
CURRENT APPLICATION NUMBER: US/09/895,828
CURRENT FILING DATE: 2001-06-28
NUMBER OF SEQ ID NOS: 473
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 446
LENGTH: 294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 446, Application US/09895828 Patent No. US20020099012A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Wang, Tongtong
APPLICANT: McNeill, Patricia D.
APPLICANT: Watenabe, Yoshihiro
APPLICANT: Carter, Darrick
APPLICANT: Henderson, Robert A.
APPLICANT: Henderson, Robert A.
APPLICANT: Ralos, Michael D.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER
                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 6.9%;
Best Local Similarity 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                           Matches 294;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3471 TATCAGATCCTTTGAAAAGAGAATATTTACAATATATGACTAATTTGGGGAAAATGAAGT 3530
                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           394 ACCTAGTTACCCTGACACAAGGAGTTCTT 422
                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                1 TATCAGATCCTTTGAAAAGAGAATATTTACAATATATGACTAATTTGGGGAAAATGAAGT
                                                                          TACGTCAACGCAACGTCTAACTGGACTTCCCAAGATAAATGGTACCAGCGTCCTCTTAAA 3710
                                                                                                                                                                                                                                                       TTTGATTTATTTGTGTTTAAATGCTGCTGTCAGACGATTGTTCTTAGACCTCCTAAATGC 3590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAGAATGGATAAGCCAGCCAACTGCACCAACGAACTGTACATGATGATGATGAGGGACTGTTG 2492
                                                                                                                                                                         CCCATATTAAAAGAACTCATTCATAGGAAGGTGTTTTCATTTTGGTGTGTGCAACCCTGTCAT 3650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCTCACTCTCACAACCAATGAGGAATACTTGGACCTCAGCCAACCTCTCGAACAGTATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCATGCAGTGCCCTCCCAGAGACCAACGTTCAAGCAGTTGGTAGAAGACTTGGATCGAAT 2552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TAGGATGGACAAGCCAGCAAACTGCACCAACGAACTGTATATGATGATGAGAGACTGCTG
AGATGCCTTAATCCATTCCTTGAGGACAGACCTTAGTTGAAATGATAGCAGAAT 3764
                                                                                                                                                                                                                                   TTTGATTTATTTGTGTTTAAATGCTGCTGTCAGACGATTGTTCTTAGACCTCCTAAATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCTAGTTACCCTGACACAAGAAGTTCTT 2641
                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                           Score 294; DB 10; Pred. No. 7.6e-59;
                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2612
                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               273
                                                                                                                                                                                                                                                                                                                                                                                             0,
```

RESULT 13 US-10-108-605-250

```
PRIOR APPLICATION NUMBER: US 60/176,418
PRIOR FILLING DATE: 2000-01-14
NUMBER OF SEQ ID NOS: 361
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 250
LENGTH: 2782
TYPE: DNA
ORGANISM: Drosophila melanogaster
US-10-108-605-250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             οy
                                                                                                                                              Ş
                                                                                                                                                                                    Вþ
                                                                                                                                                                                                                     Q
                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                            γQ
                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  몽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     뭉
Š
                                    밁
                                                                 δ
                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 250, Application US/10108605 Patent No. US20020160934A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches 547;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: NUCLEIC ACID SEQUENCES FROM DROSOPHILA MELANOGASTER THAT ENCODE TITLE OF INVENTION: PROTEINS ESSENTIAL FOR LARVAL VIABILITY AND USES THEREOF FILE REFERENCE: 31133B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: US 09/761,142 PRIOR FILING DATE: 2001-01-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/10/108,605
CURRENT FILING DATE: 2002-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Broadus, Julie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1710
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1246
                                      1819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1306
                                                                                                                                                                                      1699
                                                                                                                                                                                                                                                             1639
                                                                                                                                                                                                                                                                                                                                      1579
                                                                                                                                                                                                                                                                                                                                                                                                               1519
                                                                                                                                                                                                                                                                                                                                                                                                                                                 1950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1650 GCTGGCAGGGGTCTCCGAGTATGAACTTCCAGAGGACCCAAAATGGGAGTTTCCAAGAGA 1709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAAAGATGATGCCACAGAGAAAGACCTTTCTGATCTGGTGTCAGAGATGGAGATGATGAA 1889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TAAGCTGACACTGGGCAAGCCCCTGGGAGAAGGTTGCTTTGGGCAAGTGGTCATGGCGGA 1769
                                                     CTATTACAAAAGACCACCAATGGGCGGCTTCCAGTCAAGTGGATGGCTCCAGAAGCCCT
                                                                                                                              AGAAAACAATGTGATGAAAATAGCAGACTTTGGACTCGCCAGAGATATCAACAATATAGA
                                                                                                                                                                                                         GTACTTGGCTTCCCAAAAATGTATTCATCGAGATTTTAGCAGCCAGAAATGTTTTGGTAAC
                                                                                                                                                                                                                                                                                        GGAGCAGATGACCTTCAAGGACTTGGTGTCATGCACCTACCAGCTGGCCAGAGGCATGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                TCTCTATGTCATAGTTGAGTATGCCTCTAAAGGCAACCTCCGAGAATACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GATCATIGGGCGACATATCAATATTAACCTACTIGGTTGCTGCAGTCAAAATGGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GATGATTGGGAAACACAAGAATATCATAAATCTTCTTGGAGCCTGCACACAGGATGGGCC 1949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGCAGTGGGAATTGACAAAGACAAGCCCAAGGAGGCGGTCACCGTGGCCCGTGAAGATGTT 1829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCCGGCTCCATTCAATGAATATGAATTTCCACTGGACTCGAACTGGGAACTGCCCAGAAG 1305
GTTTGATAGAGTATACACTCATCAGAGTGATGTCTGGTCCTTCGGGGTGTTAATGTGGGA
                                    CGATGATTATGTGCTGAAGATTGCTGATTTTGGACTGGCGAGGGATATCCAAAGCACGGA
                                                                                                                                                                                    CTATTTGGCCTCGCGGCGATGCATCCATCGAGATTTGGCAGCCAGGAATCTGCTCGTCAG
                                                                                                                                                                                                                                                             TCATGTGATAACCGAAAAGGATCTGATCAAATTTGCCCACCAAATTGCCAGAGGAATGGA
                                                                                                                                                                                                                                                                                                                                  TCGCCGATCCGGAAGGGATCAGGACAGGGACAGCTCGCAACCGCCGCCATCGCCACCAGC 1638
                                                                                                                                                                                                                                                                                                                                                                   ---CCGAGCCCGGAGGCCACCCGGGATGGAGTACTCCTATGACATTAACCGTGTTCCTGA
                                                                                                                                                                                                                                                                                                                                                                                                         GCTCTATGTGATTGTCGAGTATGCGCCACACGGAAATCTCAAGGACTTCCTCTATAGGAA 1578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAAGGAAGGACACACGGATGATGACATTGCCAGCTTGGTGCGGGAAATGGAAGTGATGAA 1458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCATTTGGTACTGGGTGCCACTTTGGGAGAAGGTGCTTTCGGACGAATGGTCATGGCGGA 1365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bachmann, Jane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Kamdar, Kim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Stam, Lynn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            59.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ------ATAATGCCATTGTCGCCGTGAAAATGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 275.2; DB 9;
Pred. No. 5.4e-54;
0; Mismatches 333;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels 42; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2782;
                                                                                                                                                                                                                     2177
                                                                                                                                                                                                                                                                                             2117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1518
                                                                       2297
                                                                                                           1818
                                                                                                                                               2237
                                                                                                                                                                                    1758
                                                                                                                                                                                                                                                             1698
                                                                                                                                                                                                                                                                                                                                                                      2057
                                                                                                                                                                                                                                                                                                                                                                                                                                               2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         . w
```

```
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)...(33239)
; OTHER INFORMATION: n = /
US-09-814-950-3
                                                                                                                                                                              В
                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 14
US-09-814-950-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
밁
                                                         B
                                                                                     Ş
                                                                                                                    밁
                                                                                                                                               Š
                                                                                                                                                                                                                                         망
                                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                  Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
APPLICANT: WEI, Ming-Hui et al
                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: FastSEQ for Windows Version SEQ ID NO 3 LENGTH: 33239 TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 3, Application US/09814950 Patent No. US20020137130A1
                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: ISOLATED HUMAN SECRETED PROTEINS, TITLE OF INVENTION: UNCLEIC ACID MOLECULES ENCODING | TITLE OF INVENTION: USES THEREOF FILE REFERENCE: CL001174 CURRENT FILICATION NUMBER: US/09/814,950 CURRENT FILING DATE: 2001-03-23 NUMBER OF SEO ID NOS: 4
                                                                                                                   29970
                                                                                                                                                                              29910
                                                                                                                                                                                                                                      ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1879
                                                                                                                                                497
                                                                                                                                                                                                           437
                             617
                                                                                       557
                                                                                                                                                                                                                                                                   377 CAGAAGAGCCCACCAACCAAATACCAAATCTCTCAACCAGAAGTGTACGTGGCTGCGCCAG 436
                                                                                                                                                                                                                                                                                                  Local Similarity les 273; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGAGTATATGGATAAGCTGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GATGATGAGGGACTGTTGGCATGCAGTGCCCTCCCAGAGACCAACGTTCAAGCAGTTGGT 2534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCTGCTGAAGGAAGGACACAGAATGGATAAGCCAGCCAACTGCACCAACGAACTGTACAT 2474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GATCATGACCTATGGGCAGCAACCATATCCAACTATCATGTCCGCGGAGGAGCTGTACAC 1998
                                                                                                                AGAAGACTTGGATCGAATTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTATCTCATGTCCGGTCAGCGGATGGAGAAGCCAGCGAAATGCTCCATGAACATTTACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GATCTTCACTTTAGGGGGCTCGCCCTACCCA---GGGATTCCCGTGGAGGAACTTTTTAA 2414
               GTGAAACTTGGTACTTCATGGTGAATGTCACAGATG 652
                                                                       AGGGGCCACGCCTAGAGACTCCGGCCTCTATGCTTGTACTGCCAGTAGGACTGTAGACA 616
                                                                                                                                                                            GGGAGTCGCTAGAGGTGCGCTGCCTGTTGAAAGATGCCGCCGTGATCAGTTGGACTAAGG 496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCTGATGCGACAATGTTGGCATTTCAACGCCGACGATCGGCCACCTTTTACGGAAATCGT
GTGAAACTTGGTACTTCATGGTGAATGTCACAGGTG
                                                        AGGGCGCCACGCCTAGAGACTCCGGCCTCTATGCTTGTACTGCCAGTAGGACTGTAGACA
                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                               98.98;
                                                                                                                                                                                                                                                                                                                                                                            A,T,C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2556
                                                                                                                                                                                                                                                                                                 Score 271.2;
Pred. No. 1.6e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                          or
                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                            2; DB 10;
1.6e-52;
30125
                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HUMAN SECRETED PROTEINS,
                                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                33239;
                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2058
                                                           30089
                                                                                                                   30029
                                                                                                                                                                              29969
                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AND
```

RESULT 15
US-09-731-872-128
; Sequence 128, Application US/09731872
; Patent No. US20020102604A1

```
ş
Search completed: December 11, 2002, 17:40:36 Job time: 388 secs
                                                             밁
                                                                                       Ş
                                                                                                                   В
                                                                                                                                                                                 В
                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                       ş
                                                                                                                                                                                                                                                                                                        Вр
                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-731-872-128
                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: 179..427
NAME/KEY: s19_peptide
LOCATION: 179..298
OTHER INFORMATION: Von Heijne matrix
OTHER INFORMATION: score 7.72883276007822
OTHER INFORMATION: seq CLVVVTMATLSLA/RP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Bougueleret, Lydie
APPLICANT: Jobert, Severin
TITLE OF INVENTION: FULL-LENGTH HUMAN CDNAS ENCODING POTENTIALLY SECRETED PROTEINS
FILE REPERENCE: 78.US3.REG
CURRENT APPLICATION NUMBER: US/09/731,872
CURRENT FILING DATE: 2000-12-07
PRIOR APPLICATION NUMBER: US 60/169,629
PRIOR FILING DATE: 1999-12-08
PRIOR FILING DATE: 1999-12-08
PRIOR APPLICATION NUMBER: US 60/187,470
PRIOR APPLICATION NUMBER: US 60/187,470
PRIOR FILING DATE: 2000-03-06
NUMBER OF SEQ ID NOS: 482
SOFTWARE: Patent.pm
SEQ ID NO 128
LENGTH: 618
                                                                                                                                                                                                                                                                                                                                                                 Query Match 6.3
Best Local Similarity 99.6
Matches 263; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: Dumas Milne Edwards, Jean Baptiste
                                                         6.1%; Score 262.4; DB 10; 99.6%; Pred. No. 2.3e-51; ative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                            Length 618;
                                                                                                                                                                                                                                                                                                                                                               0.
                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                 0;
```

```
Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Run
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Total number
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Post-processing:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Minimum
    a
                                                                                O
                                                                                                                                       ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              on:
                                                                                                                                                                                                                              Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB seq length: 0
DB seq length: 2000000000
    840.6
765.6
762.8
731.4
707.4
688.2
                                                                                                                                   Score
                                                                                                                                                                                                                                                                                                            EST:*
: en,
2: en,
3: ep,
4: em,
5: em,
6: em,
7: em,
7: em,
110: c,
111: c,
111: c,
112: c,
113: c,
114: c,
115: c,
116: c,
117: c,
118: c,
1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-954-556-3
4268
1 cccaaggaccactr
                                                                                                                                     Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16154066 seqs, 8097743376 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          December 11, 2002, 14:19:57; Search time 3671 Seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
  19.7
17.9
17.9
17.1
16.6
16.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gb_est1:*
gb_est2:*
gb_htc:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          em_estov:*
em_estpl:*
                                                                                                                                                                                                                                                                                                          em_gss_other:*
em_gss_pro:*
em_gss_rod:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    em_htc: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   em_estin:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       em_estba:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          em_estro:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   em_estmu:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         em_esthum:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gb_est4:*
gb_est5:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gb_est3:*
                                                                                                                                                                                                                                                                                                                                                                     em_gss_mam:*
em_gss_mus:*
                                                                                                                                                                                                                                                                                                                                                                                                           em_gss_fun:*
                                                                                                                                                                                                                                                                                                                                                                                                                            em_gss_vrt:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    em_gss_inv:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        em_gss_hum:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gb_gss:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               em_estom: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 em_estfun:*
                                                                                                                                     Length DB
  885
833
803
803
987
834
747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GenCore version 5.1.3 (c) 1993 - 2002 Compus
    14
12
9
                    BQ438964
AI127918
AU132307
BQ879891
BG698600
                                                                                                                                       ij
    AI081876
                                                                                                                                                                                             SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (without alignments)
18829.294 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       32308132
                BQ438964 AGENCOURT
AI127918 gc46g09.x
AU132307 AU132307
BQ879891 AGENCOURT
BG698600 602658361
                                                                                                                                 Description
AI081876 ox77a01.x
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 1
BQ438964
LOCUS
DEFINITION
                                                                                                                                                                                                                                                REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
KEYWORDS
                    FEATURES
                                                                                                                                                                                                                                  COMMENT
                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C
                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
          Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAM13218 row: h column: 01
High quality sequence stop: 770.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    686.4
675.6
675.6
675.6
664.6
664.6
663.2
663.2
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
665.1
                                                                                                                                                                                                                                                            Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 885)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                         BQ438964.1 GI:21178040
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGENCOURT_7761624 NIH_MGC_70 Homo sapiens cDNA clone 5', mRNA sequence.
                                                                                                                                                                                                                                                Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                              BQ438964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    838
1013
757
795
794
861
830
894
805
1000
1000
1000
1770
7770
7746
. 885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 693
850
787
852
693
771
786
965
826
707
799
887
799
887
799
887
799
801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AI885536
BG915910
BG864512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BM792391
AI433805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AI436212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BQ931738
BI558258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B1658471
B1655009
B1656679
B1653807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BI558552
BG864499
BG706936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BM970064
AV726725
BQ575816
B1661667
B1661662
B1853362
BF059273
BI558778
BI092661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BG426972
BG974620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BI656544
BI661788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BI656483
BI853625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BQ446665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BI656261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BM793028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BG973797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BI661736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BI658887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BI659067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATB85536 wm25c10.x
BG915910 602813363
BG864512 602798531
BG155852 603240548
BG155852 603240548
BG1658471 603283088
BI655809 603283276
BI655649 603283276
BI655649 603283278
BI655649 603283278
BI655649 603283279
BI655648 603285913
BI655648 603285918
BI853625 603380751
BI661736 603305699
BQ931738 AGENCOURT
BI558258 603240291
BI652644 603285987
BI656544 603285987
BI656544 603285987
BI656544 603285987
BI656544 603285987
BI656544 603285987
BI656564 603285987
BI656564 603285987
BI656564 603285987
BI656564 603285987
BI656564 603285987
BI656564 603285987
BI656566 01344850
BG974620 602844856
BG974620 602844856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BM970064 UI-CF-EC1
AV726725 AV726725
BQ575816 UI-H-E21-
BI661597 603305723
BI661652 603305801
BIB53362 603379944
BF059273 7k57d02.x
BI558778 603241007
BI092661 602858449
BI659887 603301446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AI436212 th78905.x
BM792391 K-EST0072
AI433805 th81f11.x
```

IMAGE: 6018096

```
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     tches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2160
                                                                                                                                                   2820
                                                                                                                                                                                                               2760
                                                                                                                                                                                                                                                                        2700
                                                                                                                                                                                                                                                                                                                                    2640
                                                                                                                                                                                                                                                                                                                                                                                              2580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2220
                                                           721
                                                                                                                                                                                 601
                                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                                                                                       481
                                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
 781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           سا
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTTGTTGTCTCCACTTGTATATATGGATCAGAGGAGTAAATAATTGGAAAAGTAATCAGC
                                                                                                                                                                                                                                        CGGGGTGTTAATGTGGGAGATCTTCACTTTAGGGGGCTCGCCCTACCCAGGGATTCCCCGT 2399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAGAAATGTTTTGGTAACAGAAAACAATGTGATGAAAATAGCAGACTTTGGACTCGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAGAAATGTTTTTGGTAACAGAAAACAATGTGATGAAAATAGCAGACTTTGGACTCGCCAG
TTTTCTGGAGCAGTGGACTGCCACAAGCCACGATGTAACCCCCTCTCAACTGCCGTGCGTA
            GTTTCTGGAGCAGTGGACTGCCACAAGCCACCATGTAACCCCTCTCACCTGCCGTGCGTT
                                                       ATATGTGTAAAGATTTATACAGTTGAAAACTTGTAATCTTCCCCAGGAGG--AGAAGAAG
                                                                                                                                                                                CCAAACAGGACAGCACTGGGAACCTAGCTACACTGAGCAGGGAGACCATGCCTCCCAGAG
                                                                                                                                                                                                                                                                                                      TTGTTCTTCAGGAGATGATTCTGTTTTTTCTCCAGACCCCATGCCTTACGAACCATGCCT
                                                                                                                                                                                                                                                                                                                    TTGTTCTTCAGGAGATGATTCTGTTTTTTCTCCAGACCCCATGCCTTACGAACCATGCCT
                                                                                                                                                                                                                                                                                                                                                                CTTGGACCTCAGCCAACCTCTCGAACAGTATTCACCTAGTTACCCTGACACAAGAAGTTC
                                                                                                                                                                                                                                                                                                                                                                                            CTTGGACCTCAGCCAACCTCTCGAACAGTATTCACCTAGTTACCCTGACACAAGAAGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                          GTTCAAGCAGTTGGTAGAAGACTTGGATCGAATTCTCACTCTCACAACCAATGAGGAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                          GTTCAAGCAGTTGGTAGAAGACTTGGATCGAATTCTCACTCTCACAACCAATGAGGAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GATGGCTCCAGAAGCCCTGTTTGATAGAGTATACACTCATCAGAGTGATGTCTGGTCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GATGGCTCCAGAAGCCCTGTTTGATAGAGTATACACTCAGCAGTGATGTGTTCTGGTCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGATATCAACAATATAGACTATTACAAAAAGACCACCAATGGGCCGCTTCCAGTCAAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGATATCAACATATAGACTATTACAAAAAGACCACCAATGGGCGGCTTCCAGTCAAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       869;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Homo sapiens"
/db_xref="taxon:9606"
/db_xref="taxon:96086"
/clone="IMAGE:6018096"
/clone="timeNIH_MGC_70"
/tissue_type="epithelioid carcinoma"
/lab_host="DH10B (phage-resistant)"
/note="Organ: pancreas; Vector: pCMV-SPORT6; Site_1: NotI;
Site_2: Sall; Cloned unidirectionally. Primer: Oligo dT.
Average insert size 1.1 kb. Library constructed by Life
Technologies."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19.7%;
98.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ဂ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 840.6; DB 14;
Pred. No. 8.9e-168;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            209 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               214 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 others
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ω
••
                            2997
                                                                                      2937
                                                                                                                                                  2879
                                                                                                                                                                                                              2819
                                                                                                                                                                                                                                                                        2759
                                                                                                                                                                                                                                                                                                                                  2699
                                                                                                                                                                                                                                                                                                                                                                480
                                                                                                                                                                                                                                                                                                                                                                                              2639
                                                                                                                                                                                                                                                                                                                                                                                                                          420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2219
                                                                                                                                                                                 660
                                                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2
```

B δ 멍 δ В

В Ş ф Š ф Ş Вþ ð Б Ş B Ş ф 20 밁 õ

밁 á Ş

밁 Ş 밁 Ş

```
Ş
                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 2
AI127918/c
             Š
                                 8
                                                                           DЬ
                                                                                                                     д
                                                                                                                                         Ŷ
                                                                                                                                                                 밁
                                                                                                                                                                                                                                                              BASE
                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                     ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
TITLE
                                                                                                                                                                                                                  Query Match
Best Local
                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
              2593
                                                                                                                                                                                                                                                              COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                  647
                                                                                                                       767
                                                                             707
                                                                                                                                                                                                          hes 807;
CAACCTCTCGAACAGTATTCACCTAGTTACCCTGACACAAGAAGTTCTTGTTCTTCAGGA
                                GTAGAAGACTTGGATCGAATTCTCACTCTCACAACCAATGAGGAATACTTGGACCTCAGC
                                                                                                                    AGCTGCTGAAGGAAGGACACAGAATGGATAAGCCAGCCAACTGCACCAACGAAC-TGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGAGATCTTCACTTTAGGGGGCTCGCCTACCCAGGGATTTTCCGGTGGAGGAACTTTTAA
                                                                                                                                                                                    GGAGATCTTCACTTTAGGGGGGCTCGCCCTACCCAGG-GATTCCCCGTGGAGGAACTTTTTA 2413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q46909.xl Soares_pregnant_uterus_NbHPU Homo sapiens IMAGE:1712704 3' similar to gb:m87770 FIBROBLAST GROW RECEPTOR 2 PRECURSOR (HUMAN);, mRNA sequence. A1127918
                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anat
Tumor Gene Index
Unpublished (1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mammalia; Eutheria;
1 (bases 1 to 833)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AI127918.1
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  human
                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                               219
                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                           /note="Organ: uterus; Vector: pT7T3-Pac; Site_1: N
Site_2: Eco RI; 1st strand cDNA was primed with a
oligo(dT) primer [5'
                                                                                                                                                                                                                                                                                                                                                                                                               /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="IMAGE:1712704"
                                                                                                                                                                                                                                                                                                                                                                      /lab_host-"DH10B"
                                                                                                                                                                                                                                                                                                                                                                                /dev_stage="adult"
                                                                                                                                                                                                                                                                                                                                                                                            /sex="female"
                                                                                                                                                                                                                                                                                                                                                                                                     /clone_lib="Soares_pregnant_uterus_NbHPU"
                                                                                                                                                                                                                                                                                                                                                                                                                                                . 833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GI:3596432
                                                                                                                                                                                                                  17.98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Chordata;
Primates;
                                                                                                                                                                                                         0
                                                                                                                                                                                                                  Pred. No. 7.2e-152;
                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Craniata; Vertebrata; Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Anatomy
                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Project (CGAP)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GROWTH
                                                                                                                                                                                                                               833;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EST 27-OCT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HOMO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CDNA clon
                                                                                                                                                                                                         ω.
                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                 Not I;
                                                                                                                     708
                                                                                                                                           2472
             2652
                                                      2592
                                                                            648
                                                                                                2532
                                                                                                                                                                 768
                                  588
                                                                                                                                                                                                         ω
··
```

밁

```
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                        REFERENCE
AUTHORS
                                                                                                                                                                                                                             ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                     RESULT 3
AU132307
                                          FEATURES
                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                              Locus
                               source
                                                                                                                                                                                                                                                                                                                                                             3132
                                                                                                                                                                                                                                                                                                                                                                                                 3072
                                                                                                                                                                                                                                                                                                                                                                                                                                      3012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2832
                                                                                                                                                                                                                                                                                                                                                                                                                   167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             527
                                                                                                                                                                                                                                                                                                                                                                              107
                                                                                                                                                                                                                                                                                                                                                                                                                                                        227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   587
                                                                                                                                                                                                                                                                                                                                           47
                                                      Genomics Laboratory
Helix Research Institute
1532-3 Yana, Kisarazu, Chiba 292-08
Tel: 81-438-52-3975
Fax: 81-438-52-3986
Email: genomics@hrl.co.jp
HRI human cDNA project; 5'- 6 3'-en
Research Institute; cDNA library cc
Virology, Institute of Medical Scie
                                                                                                                                                                                                                                                                                                                                       ATTTATACAGTTGAAAACTTGTAATCTTCCCCAGGAGGAGAAGAAGGTTTCTGGAGCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCACTGGGAACCTAGCTACACTGAGCAGGGAGACCATGCCTCCCAGAGCTTGTTGTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CACATTAACGGCAAGTGTTAAACCATGAATGACTGTGTCTGCCTGTCCCCCAAACAGGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CACATAAACGGC-AGTGTTAAAACATGAATGACTGTGTCTGCCTGTCCCCAAACAGGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGACTGCCACAAGCCATGTAACCCCTCTCACCTGCCGTGCGTACTGGCTGTGGACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGACTGCCACAAGCCACCATGTAACCCCTTCTCACCTGCCGTGCGTTCTGGCTGTGGACCA 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCACTGGGAACCTAGCTACACTGAGCAGGGAGACCATGCCTCCCAGAGCTTGTTGTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAACCTCTCGAACAGTATTCACCTAGTTACCCTGACACAAGAAGTTCTTGTTCTTCAGGA
                                                                                                                                                                                                                                                       sequence.
AU132307
AU132307.1
                                                                                                                                                                                                                                                                                  AU132307
AU132307
                                                                                                                                                                                        Ota,
                                                                                                                                         Contact: Takao Isogai
                                                                                                                                                   HRI human cDNA project 
Unpublished (2000)
                                                                                                                                                                                                           Eukaryota;
Mammalia; |
                                                                                                                                                                                                                                                EST
                                                                                                                                                                              Yamamoto,J., Wakamatsu,A.,
                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                      numan
                                                                                                                                                                                                 (bases
                                                                                                                                                                                     T., Nishikawa, T., Suzuki, Y., Ishii, S.,
                                                Research Institute
                                                                                                                                                                                               Eutheria; 5 1 to 803)
                                                                                                                                                                                                                                                                                    NT2RP3
 /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="NT2RP3004190"
                                      Location/Qualifiers
                               .803
                                                                                                                                                                                                                                                        GI:10992661
                                                                                                                                                                                                                                                                                   Homo
                                                                                                                                                                                                       Chordata; Craniata; Vertebrata; Euteleostomi; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                 803
sapiens
                                                                                                                                                                               Nakamura,Y.,
                                                                                                                                                                                                                                                                                  bp
cDNA
                                                                                                              292-0812,
                                                    3'-end one pass sequencing: Helix ary construction: Department of 1 Science, University of Tokyo, and
                                                                                                                                                                                                                                                                                  mRNA
clone
                                                                                                                                                                                                                                                                                  linear |
NT2RP3004190
                                                                                                                                                                              Nagai,T.,
                                                                                                                                                                                                                                                                                                                                                          3175
                                                                                                                                                                                     Saito, K.,
                                                                                                                                                                             Sugano,
                                                                                                                                                                                                                                                                                EST (
                                                                                                                                                                                      Kawai,Y.,
                                                                                                                                                                                                                                                                                          01-AUG-2002
                                                                                                                                                                                                                                                                                  mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                      168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2891
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2831
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              288
                                                       and
        RESULT 4
BQ879891
LOCUS
                                                      밁
                                                                       Š
                                                                                         밁
                                                                                                        Qy
                                                                                                                              밁
                                                                                                                                             Qy
                                                                                                                                                                  Вþ
                                                                                                                                                                                  δÃ
                                                                                                                                                                                                       Вр
                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                               δδ
                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                                                                                                                                         멍
                                                                                                                                                                                                                                                                                                                                                                       γQ
                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BASE
                                                                                                            2154
                                                                                                                                                                                                                                                                                                                                                                           1734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1494
                                                                                                                                                                                    2034
                                                                                                                                                                                                                         1974
                                                                                                                                                                                                                                                                                                  1854
                                                                                                                                                                                                                                                                                                                                      1794
                                                                                                                                                                                                                                                                                                                                                                                                              1674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1554
                                                                                                                                                                                                                                                              1914
                                                                                                                                                                                                                                                                                                                                                                                                                                                    1614
                                                       780
                                                                                                                                                                   601
                                                                                                                                                                                                       541
                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                421
                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               _
```

밁 δõ B Ş DЬ Ş 뫄 ρ В οy 밁 Š 밁 Q В Q Ъ Ş

```
Query Match
Best Local Sim
Matches 790;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1434 AATCGCCTGTATGGTGGTAACAGTCATCCTGTGCCGAATGAAGAACACGACCAAGAAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNT
                                                                                                                                     CTACCAGCTGGCCAGAGGCATGGAGTACTTGGCTTCCCAAAAATGTATTCATCGAGATTT
                                                                                                                                                                                                                                                                                CTCTAAAGGCAACCTCCGAGAATACCTCCGAGCCCGGAGGCCACCCGGGATGGAGTACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGCAGCCAGAAATGTTTTGGTAACAGAAAACAATGTGATGAAAATAGCAGACTTT--GGA 2211
                                                                                                                                                                                                            CTATGACATTAACCGTGTTCCTGAGGAGCAGATGACCTTCAAGGACTTGGTGTCATGCAC
                                                                                                                                                                                                                                                                                                                                                                          CATAAATCTTCTTGGAGCCTGCACACAGGATGGGCCTCTCTATGTCATAGTTGAGTATAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCTTTCTGATCTGGTGTCAGAGATGGAGATGATGAAGATGATTGGGAAACACAAGAATAT 1913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCCCAAGGAGGCGGTCACCGTGGCCGTGAAGATGTTGAAAGATGATGATGACCACAGAGAAAGA 1853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AACAACACGCCTCTCTAAACGGCAGACACCCCCATGCTGGCAGGGGTCTCCGAGTATGA 1673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGTAACAGTTTCGGCTGAGTCCAGCTCCTCCATGAACTCCAACACCCCGCTGGTGAGGAT 1613
TCGNCCAGAGATNTCAACAATTT
                    CTCGCCAGAGATATCAACAATAT
                                                                                                                                                                                                                                                                                                                                                         CATAAATCTTCTTGGAGCCTGCACACAGGATGGGCCTCTCTATGTCATAGTTGAGTATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                 CCTTTCTGATCTGGTGTCAGAGATGGAGATGATGAAGATGATTGGGAAACACAAGAATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCCCAAGGAGGCGGTCACCGTGGCCGTGAAGATGTTGAAAGATGATGCCACAGAGAAAGA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACTTCCAGAGGACCCAAAATGGGAGTTTCCAAGAGATAAGCTGACACTGGGCAAGCCCCT 1733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGACTTCAGCAGCCAGCCGGCTGTGCACAAGCTGACCAAACGTATCCCCCTGCGGAGACA 1553
                                                                   ANCAGCCAGAAATGTTTTGGTAACAGAAAACAATGTGATGAAAATAGCAGACTTTTGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGACTTCAGCAGCCAGCCGGCTGTGCACAAGCTGACCAAACGTATCCCCCTGCGGAGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AATCGCCTGTATGGTGGTAACAATCATCCTGTGCCGAATGAAGAACACGACCAAGAAGCC 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note="Vector: pME18SFL3; mRNA from NT2 neuronal cells after 2-weeks retinoic acid (RA) induction" 193 c 210 g 166 t 3 others
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /clone_lib="NT2RP3"
/cell_type="teratocarcinoma"
/cell_line="NT2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17.9%;
98.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 762.8; | Pred. No. 2.8e
                                 2234
802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; DB 9;
.8e-151;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ω
••
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                             1973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       precursor
                                                                                                                                                                         2153
                                                                                                                                                                                                                                                                                                                      2033
                                                                                                                                                                                                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                              660
                                                                                                                                                                                                                                                2093
                                                                                                                                                                                                                                                                                    600
                                                                                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ņ
```

BQ879891 987 bp mRNA linear AGENCOURT_8232182 Lupski_dorsal_root_ganglion Homo

sapiens

16-AUG-2002

```
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMMENT
                      γ
                                                                                   9
                                                                                                                          g
                                                                                                                                                  δÃ
                                                                                                                                                                                        В
                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                   9
                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                            BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                          g
                                                                                                                                                                                                                                                      당
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                         2760
                                                                                                                                                                                                                        2700
                                                                                                                                                                                                                                                                                    2640
                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                        131
                                                                                                                           191
                                                                                                                                                                                                                                                                                                                                                                                 Local Sim
311
                                                                                                                                                                                                                                                      71
                                                                                                                                          TTGTTCTTCAGGAGATGATTCTGTTTTTTCTCCAGACCCCATGCCTTACGAACCATGCCT 2699
              ATATGTGTAAAGATTTATACAGTTGAAAACTTGTAATCTTCCCCAGGAGGAGGAAGAAGGT
                                                                              CTTGTTGTCTCCACTTGTATATATGGATCAGAGGAGTAAATAATTGGAAAAGTAATCAGC
                                                                                                                           CCAAACAGGACAGCACTGGGAACCTAGCTACACTGAGCAGGGAGACCATGCCTCCCAGAG
                                                                                                                                                                                           TTGTTCTTCAGGAGATGATTCTGTTTTTTCTCCAGACCCCATGCCTTACGAACCATGCCT
ATATGTGTAAAGATTTATACAGTTGAAAACTTGTAATCTTCCCCCAGGAGGAAGAAGGT
                                                             CTTGTTGTCTCCACTTGTATATATGGATCAGAGGAGTAAATAATTGGAAAAGTAATCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Dr. James R. Lupski
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bloscience Corporation
Clone distribution: MGC clone distribution information car
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAM13569 row: c column: 09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         clone IMAGE
BQ879891
BQ879891.1
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NIH-MGC http://mgc.nci.nlh.gov/.
National Institutes of Health, Mammalian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Mammalia; Eutheria; 1 (bases 1 to 987)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Contact: Robert Strausberg,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            human.
                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          quality sequence stop:
                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IMAGE: 6182720
                                                                                                                                                                                                                                                                                                                                                                                                                                                            þ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5'-GACTAGTTCTAGATCGCGAGCGGCCGCCT(15)-3'. Size selected I kb for average insert length 1.7 kb. This is a primary library, non-amplified. Library constructed by Life Technologies and donated by J. Lupski, M.D./Ph.D. (Baylc College of Medicine) and is available through Life
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note="Vector: pCMV-SPORT6 (Life Technologies); Site_1: NotI; Site_2: SalI; cDNA made by oligo-dT priming. Directionally cloned using the following adaptors: 5'-TCGACCCACGCGTCCG-3' and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="IMAGE:6182720"
/clone_lib="Lupski_dorsal_root_ganglion"
/sex="male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        rechnologies."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /tissue_type="dorsal root
/dev_stage="adult, 36 yr"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GI:22271899
                                                                                                                                                                                                                                                                                                                                                                                              17.18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ი
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Chordata;
Primates;
                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                Score 731.4; DB 14
Pred. No. 1.3e-144;
0; Mismatches 41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            180 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          645.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              304 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ganglia"
                                                                                                                                                                                                                                                                                                                                                                                                                DB 14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gene
                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                987;
                                                                                                                                                                                                                                                                                                                                                                                   ភ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          can
                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      primary
                                                                                                                                                                                                                                                         130
                                                                                                                                                                                                                                                                                                                                                    2639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (Baylor
                                  2939
                                                                                              2879
                                                                                                                                                            2819
                                                                                                                                                                                           190
   370
                                                                 310
                                                                                                                               250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ٧
                                                                                                                                                                                                                                                                                                                                                                                   ω
••
```

```
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 5
BG698600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                  COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  611
                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TRATTTTTGTATTGAATTTAAATGGATGTCCCAATGCACCTAG-AAAATTGGTCTCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATAATTGGAGAAGATTTATGTCAGCACACACTTACAGAGCACAAATGCAGTATATAGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGAGGTGGAAAAATACTTTT----GCTTTCAGGGAAAATGGTATAACGT-TAATTTATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATAATTGGAGAAGATTTATGTCAGCACACACTTACAGAGCACAAATGCAGTATATAGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGAGGTGGAAAAATACTTTTGCCTTTCACGGAAAAATGGTATAACGTCTAATTTATTA
                                                                                                                                                                                               cDNA Library Preparation: Life Technologies, Inc. cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLN Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution: MGC clone distribution information found through the I.M.A.G.E. Consortium/LLNL at: http://image.lnl.gov
                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; 1 (bases 1 to 834)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collec
                                                                                                                                                                                                                                                                                                                                                                                                                                         EST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BG698600 E
602658361F2 NCI_CGAP_Skn3
                                                                                                                                          High quality sequence start: 7
High quality sequence stop: 833.
Location/Qualifiers
                                                                                                                                                                                                                                                                                     Email: cgapbs-r@mail.nih.gov
Tissue Procurement: James Cleaver,
                                                                                                                                                                                                                                                                                                               Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                              Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                       BG698600.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BG698600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    mRNA sequence.
                                                                                                                                                                                     Plate: LLAM10694
/organism="Homo sapiens"
/db_xref="taxon:9606"
/db_xref="taxon:9606"
/clone="Ib#"RCI_CGAP_Skn3"
/clone=lib#"NCI_CGAP_Skn3"
/lab_host="DH10B (T1 phage-resistant)"
/note="Organ: sk1n: Vector: pCMV-SPORT6; Site_1: Nc Site_2: Sall: Cloned unlidirectionally. Primer: Ol: Average insert size 1.8kb. Library constructed by Technologies. Note: this is a NCI_CGAP Library."
                                                                                                                                 1. .834
                                                                                                                                                                                                                                                                                                                                                                                                                                                        GI:13966051
                                                                                                                                                                                       row: i column: 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               dq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sapiens
                                                                                                                                                                                                                                                                                       M.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
A clone
                                                                                                                                                                                                                                                                                                                                              Collection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EST 07-MAY-2001
IMAGE: 4801623 5',
                                                                                                                                                                                                                                                                                                                                                                                                    Euteleostomi;
                                                                                                                                                                                                                                                            (LLNL) DNA
                                                                                                                                                                                                                                                                                                                                                                                       Ното.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           490
                               dT.
```

```
LOCUS
DEFINITION
                                                                       RESULT 6
AI081876/c
                                                                                                                                   Ş
                                                                                                                                                           В
                                                                                                                                                                             Qy
                                                                                                                                                                                                      밁
                                                                                                                                                                                                                       ν
                                                                                                                                                                                                                                              망
                                                                                                                                                                                                                                                                   δÔ
                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                         Дb
                                                                                                                                                                                                                                                                                                                                                                                                Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                       Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   γO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BASE CO
            VERSION
                      ACCESSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNT
                                                                                                                                                                                  2894
                                                                                                                                                                                                                           2836
                                                                                                                                                                                                                                                                                                               2716
                                                                                                                                                                                                                                                                                                                                                          2656
                                                                                                                                                                                                                                                                                                                                                                                                   2596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2296
                                                                                                                                                                                                                                                626
                                                                                                                                                                                                                                                                                                                                                                              447
                                                                                                                                                                                                       685
                                                                                                                                                                                                                                                                                          566
                                                                                                                                                                                                                                                                                                                                                                                                                       387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local 5. 785;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27
                                                                                                                                                                                                                                                                                                                                                                                                                   GAAGACTIGGATCGAATICTCACTCTCACAACCAATGAGGAATACTTGGACCTCAGCCAA 2595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GACTATTACAAAAAGACCACCAATGGGCGGCTTCCAGTCAAGTGGATGGCTCCAGAAGCC 2295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GACTGCCACGAGCCACATGTAACCCTCTC
                                                                                                                            GACTGCCACAAGCCACCATGTAACCCCTC
                                                                                                                                                          TTATAC - AGTTGAAAACTTGTAATCTTCCCCAGGAGGAGAAGAAGGTTTCTGGAGCAGTG
                                                                                                                                                                                                               GTATATATGGATCAGAGGAGTAAATAATTGGAA--AAGTAATCAGCATATGTGTAAAGAT 2893
                                                                                                                                                                                                                                              TGGGAACCTAGCTACACTGAGCAGGGAGACCATGCCCAGAGCTTG-TGTCTCCACTT
                                                                                                                                                                                                                                                         TGGGAACCTAGCTACACTGAGCAGGGAGACCATGCCTCCCAGAGCTTGTTGTCTCCACTT 2835
                                                                                                                                                                                                                                                                                                   ATAAACGGCAGTGTTAAAACATGAATGACTGTGTCTGCCTGTCCCCAAACAGGACAGCAC
                                                                                                                                                                                                                                                                                                                                  GATTCTGTTTTTCTCCAGACCCCATGCCTTACGAACCATGCCTTCCTCAGTATCCACAC
                                                                                                                                                                                                                                                                                                                                            GATTCTGTTTTTTCTCCAGACCCCATGCCTTACGAACCATGCCTTCCTCAGTATCCACAC
                                                                                                                                                                                                                                                                                                                                                                           CCTCTCGAACAGTATTCACCTAGTTACCCTGACACAAGAAGTTCTTGTTCTTCAGGAGAT 2655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATGATGAGGGACTGTTGGCATGCAGTGCCCTCCCAGAGACCAACGTTCAAGCAGTTGGTA 2535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGCTGAAGGAAGGACACAGAATGGATAAGCCAGCCAACTGCACCAACGAACTGTACATG 2475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAGATCTTCACTTTAGGGGGCTCGCCCTACCCAGGGATTCCCGTGGAGGAACTTTTTAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAGATCTTCACTTTAGGGGGCTCGCCCTACCCAGGGATTCCCGTGGAGGAACTTTTTAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGTTTGATAGAGTATACACTCATCAGAGTGATGTCTGGTCCTTCGGGGTGTTAATGTGG
                                                                                                                                                                                                     GTATATATGGATCAGAGGAGTAAATAATCGGAAACAGTCAATCAGCATATGTGTAAAGAT
                                                                                                                                                                                                                                                                                        ATGATGAGGGACTGTTGGCATGCAGTGCCCTCCCAGAGACCAACGTTCAAGCAGTTGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGCTGAAGGAAGGACACAGAATGGATAAGCCAGCCAACTGCACCAACGAACTGTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGTTTGATAGAGTATACACTCATCAGAGTGATGTCTGGTCCTTCGGGGGTGTTAATGTGG
                    AIO81876 747 bp mRNA linear EST 24-SEP-1998 0x77a01.x1 Soares_NhHMPU_S1 Homo sapiens cDNA clone IMAGE:1662312 3' similar to gb:M87770 FIBROBLAST GROWTH FACTOR RECEPTOR 2 PRECURSOR (HUMAN);, mRNA sequence.
AIO81876
 AI081876.1
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ø
          GI:3418668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16.6%;
97.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 707.4;
Pred. No. 1.6e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                      2981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.6e-139;
ches 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2415
                                                                                                                                                                                                                                                                                        625
                                                                                                                                                                                                                                                                                                                                  565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        326
                                                                                                                                                           804
                                                                                                                                                                                                                                                                                                             2775
                                                                                                                                                                                                                                                                                                                                                        2715
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           206
                                                                                                                                                                                                                                                                                                                                                                           BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
TITLE
      Ş
                             밁
                                             Qγ
                                                                     Ъ
                                                                                        Š
                                                                                                              DЬ
                                                                                                                                γQ
                                                                                                                                                         ₽
                                                                                                                                                                            Q
                                                                                                                                                                                                  ₽
                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                           Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOURCE
                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                         3612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                503
                                                                                                                                                                                                    623
                                                                                                                                                                                                                                                                                       743
                                                                                                                                                                                                                                                                                                                                                                                     245
```

```
3493 ATATTTACAATATATGACTAATTTGGGGAAAAIGAAGTTTTGATTTATTTGTGTTTAAAT 3552
                                                                                                                                                                                                                                                                                                                                         ATATTTTCCAAATATGNCTATTTGGGGNAAAATGAAGTTTTGATTTAAATTGTGTTTAAAT 684
                                 GAGGACAGACCTTAGTTGAAATGATAGCAGAATGTGCTTCTCTCTGGCAGCTGGCCTTCT
                                                                                                                                 GCTTCTGAGTTGCACATTAATCAGATTAGCCTG-ATTCTCTTCAGTGAATTTTTGATAATG
                                                                                                                                                                                                                                                                                   TGGACTTCCCAAGATAAATGGTACCAGCGTCCTCTTAAAAGATGCCTTTAATCCATTCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                         GCTGCTGTCAGACGATTGTTCTTAGACCTCCT-AAATGCCCCATATTAAAAAGAACTCATT 3611
AATTGAAACACAGAGTTGTTCTGCTGATAGTTTTGGGGGATACGTCCATCTTTTTAAGGGA
                                                                                                             GCTTCTGAGTTGCACATTAATCAGATTAGCCTGTATTCTCTTCAGTGAATTTTGATAATG
                                                                                                                                                                                       TGGACTTCNCAAGATAAATGGTACCAGCGTCCTCTTAAAAGATGCCTTAATCCATTCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                     al Similarity
727; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mammalia; Eutheria;
l (bases 1 to 747)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unpublished (1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tumor Gene Index
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (Pharmacia) with a modified polylinker; Site_1: Not 1; Site_2: Eco RI; Equal amounts of plasmid DNA from three normalized libraries (melanocyte 2NbHM, pregnant uterus NbHPU, and fetal heart NbHH19W) were mixed, and ss circles were made in vitro. Following HAP purification, this DNA was used as tracer in a subtractive hybridization reaction. The driver was PCR-amplified cDNAs from pools of 5,000 clones made from the same 3 libraries. The pools consisted of I.M.A.G.E. clones 260232-265223, 340488-345479, and 484488-489479."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /clone="IMAGE:1662312"
/Clone_lib="Soares_NhHMPu_S1"
/tissue_type="Pooled human melanocyte, fetal heart,
pregnant uterus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note="Organ: mixed (see below); Vector:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Homo sapiens"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16.1%;
97.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Chordata;
Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 688.2; DB 9;
Pred. No. 1.9e-135;
D; Mismatches 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Craniata; Vertebrata;
Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Anatomy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Project (CGAP),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     pT7T3D-Pac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                       3908
                                                                                                                                                                                                                                                                                                                                                                                 3671
                                                                                                                                                                                                                                                                                                       3731
                                                                                                                                                                                       444
                                                                                                                                                                                                                                                                   504
                                                                                                                                                                                                                                                                                                                                             564
                                                                                                                                                                                                                                                                                                                                                                                                                         624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           circles
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     of.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ψ
```

```
RESULT 7
AI436212/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
KEYWORDS
SOURCE
                                       ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                             COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Вр
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FOCUS
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                  COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3969
                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACTCACTTTGCAATAGCCGTGCAAGATGAATGCAGATTACACTGATCTTATGTGTTACAA 4148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACAAAATATCGCCGTTGTTCCTTCCTGTACTAAAGTATTGTGTTTTTGCTTTTGGAAACACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTGCTTTCATCTAATTCTGGCAGGACCTCACCAAAAGATCCAGCCTCATACCTACATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTGCTTTCATCTAATTCTGGCAGGACCTCACCAAAAGATCCAGCCTCATACCTACATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACAAAATATCGCCGTTGTTCCTTCTGTACTAAAGTATTGTGTTTTGCTTTGGAAACACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AATTGAAACACAGAGTTGTTCTGCTGATAGTTTTGGGGGATACGTCCATCTTTTAAGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACTCACTTTGCAATAGCCGTGCAAGATGAATGCAGATTACACTGATCTTATGTGTTACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 755 bp mRNA linear EST 13-APR-1999 th78905.x1 Soares_NhHMPL_S1 Homo sapiens cDNA clone IMAGE:2124824 3' similar to gb:M87770 FIBROBLAST GROWTH FACTOR RECEPTOR 2 PRECURSOR (HUMAN);, mRNA sequence.
A1436212
                                                                                                                                                                                                                                                                                                                   Seq |
High
                                                                                                                                                                                                                                                                                                                              Unpublished (1997)
Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EST
                                                                                                                                                                                                                                                                                                                                                                                                                      Tumor Gene Index
                                                                                                                                                                                                                                                                                                                                                                                                                                 NCI-CGAP http://www.ncb1.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anat
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mammalia; Eutheria;
1 (bases 1 to 755)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AI436212.1
                                                    252
                                                                                                                                                                                                                                                                                                      primer: -40UP from Gibco
quality sequence stop: 443.
Location/Qualifiers
                                            /note-"Organ: mixed (see below); Vector: pT7T3D-Pac (Pharmacia) with a modified polylinker; Site_1: Not I; Site_2: Eco RI: Equal amounts of plasmid DNA from three normalized libraries (melanocyte 2NbHM, pregnant uterus NbHPU, and fetal heart NbHHJ9W) were mixed, and scircles were made in vitro. Following HAP purification, this DNA was used as tracer in a subtractive hybridization reaction. The driver was PCR-amplified cDNAs from pools of 5,000 clones made from the same 3 libraries. The pools consisted of I.M.A.G.E. clones 260232-265223, 340488-345479, and 484488-489479."
                                                                                                                                                                                                    pregnant uterus"
/lab_host="DH108"
                                                                                                                                                                                                                           /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="IMAGE:2124824"
/clone_11b="Soares_NhHMPu_S1"
/tissue_type="Pooled human melanocyte, fetal heart,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GI:4308606
16.1%;
96.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Chordata;
Primates;
Score
Pred.
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
 .8; DB 9;
3.7e-135;
                                                                                                                                                                                                                                                                                                                                                                                                                                 Anatomy
             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                 Project (CGAP),
                                                                                                                                                                                                                                                                                                                                                      contact the information.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 264
                                                                                                                                                                                                                            and
                                                                                                  KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                    RESULT 8
BM792391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                      ₽
                                                                                                                                                                                                                                                                                                                                                                            Ŷ
                                                                                                                                                                                                                                                                                                                                                                                                      ₽
                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ŷ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                             REFERENCE
                                                                                                                                       VERSION
                                                                                                                                                   ACCESSION
                                                                                                                                                                            DEFINITION
                                                                                                                                                                                          LOCUS
             TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
JOURNAL
                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                4037
                                                                                                                                                                                                                                                                                                                                                                                                                                 3977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              635
                                                                                                                                                                                                                                                                                                                                                       155
                                                                                                                                                                                                                                                                                                                                                                                                        215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             55
55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                755
                                                                                                                                                                                                                                                       35
                                                                                                                                                                                                                                                                                                       95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 725;
                                                                                                                          EST
                                                                                                                                                                                         BM792391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
```

```
TGCAATAGCCGTGCAAGATGAATGCAGATTACACTGATCTTATGTGTTACAAAATTTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGTTGCACATTAATCAGATTAGCCTG-ATTCTCTCAGTGAATTTTGATAATGGCTTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GACCTTAGTTGAAATGATAGCAGAATGTGCTTCTCTGGCAGCTGGCCTTCTGCTTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCCAAGATAAATGGTACCAGCGTCCTCTTAAAAGATGCCTTAATCCATTCCTTGAGGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATCTAATTCTGGCAGGACCTCACCAAAAGATCCAGCCTCATACCTACATCAGACAAAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGGTGTTTCATTTTGGTGTGCAACCCTGTCATTACGTCAACGCAACGTCTAACTGGACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATCTAATTCTGGCAGGACCTCACCAAAAGATCCAGGCCTCATACCTACATCAGACAAAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCCAAGATAAATGGTACCAGCGTCCTTAAAAGATGCCTTAATCCATTCCTTGAGGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGCAATAGCCGTGCAAGATGAATGCAGATTACACTGATCTTATGTGTTACAAAATTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGGTGTTTCATTTTGGTGTGCAACCCTGTCATTACGTCAACGCAACGTCTAACTGGACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACAATATATGACTAATTTGGGAAAAATGAGTTTTTGATTATTTTGTGTTAAATGCTGCTG
                                  Eukaryota; Metazoa; Chc
Mammalia; Eutheria; Pri
1 (bases 1 to 693)
Kim, N.S., Hahn, Y. Oh, J
Oh, K.J., Cheong, J.E., S
                                                                                                                                                   5', mRNA sequence.
BM792391
                                                                                                                                                                   K-EST0072606 S22SNU16n1
5', mRNA sequence.
Unpublished (2002)
         Kim, Y.S.
21C Frontier Korean
                                                                                                   Homo sapiens
                                                                                                                                          ВМ792391.1
                                                                                                                                          GI:19140623
                                                 Oh, J.H.,
             EST
                                                                          Chordata; Craniata; Vertebrata; Primates; Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                   Sohn, H.Y., Kim, J.M.,
                                                                                                                                                                               Homo
                                                                                                                                                                                          693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                 Lee, J.Y.,
                                                                                                                                                                                           þ
                                                                                                                                                                               sapiens
                                                                                                                                                                                            mRNA
                                                                                                                                                                               cDNA clone
                                     Ahn,H.Y., Chu,M.Y., Kim,M
J.M., Park,H.S., Kim,S. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                            linear
                                                                                                                                                                              er EST 05-MAR-2002
S22SNU16n1-28-B10
                                                                                      Euteleostomi;
                                                                             Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               <u>ب</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                    4156
                                                                                                                                                                                                                                                                                                                                                                                     4096
                                                                                                                                                                                                                                                                                                                                                                                                                                        4036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3498
                                                                                                                                                                                                                                                                                                                                                                                                               156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              696
                                                                                                                                                                                                                                                                                                            36
                                                                                                                                                                                                                                                                                                                                                            96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          516
                                                  .
.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2
```

```
S
                                    В
                                                                õ
                                                                                                     В
                                                                                                                              Ş
                                                                                                                                                                      밁
                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                   ρ
                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                   δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Sim.
Matches 681;
                                                                                                                                       1874
                                                                                                                                                                                                       1814
                                                                                                                                                                                                                                                                                                                                         1694
                                                                                                                                                                                                                                                                                                                                                                                                          1634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1514 CTGTGCACAAGCTGACCAAACGTATCCCCCTGCGGAGACAGGTAACAGTTTCGGCTGAGT 1573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                    481
                                                                                                                                                                      361
                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCAGCTCCTCCATGAACTCCAACACCCCGCTGGTGAGGATAACAACACGCCTCTCTTCAA 1633
 AATACCTCCGAGCCCGGAGGCCACCCGGGATGGAGTACTCCTATGACATTAACCGTGTTC
                                                 GCACACAGGATGGGCCTCTCTATGTCATAGTTGAGTATGCCTCTAAAGGCAACCTCCGAG 1993
                                                                                                                   AGATGGAGATGATGAAGATGATTGGGAAACACAAGAATATCATAAATCTTCTTGGAGCCT 1933
                                                                                                                                                                                                                                  CGGGAGACACCCCCATGCTGGCAGGGGTCTCCGAGTATGAACTTCCAGAGGACCCCAAAAT 240
                                                                                                                                                                                                                                                                                                                                                                                   CGGCAGACACCCCCATGCTGGCAGGGGTCTCCCGAGTATGAACTTCCAGAGGACCCCAAAAT 1693
                               GCACACAGGATGGGCCTCTCTATGTCATAGTTGAGTATGCCTCTAAAGGCAACCTCCGAG
                                                                                                                                                                                    TGGCCGTGAAGATGTTGAAAGATGATGCCACAGAGAAAGACCTTTCTGATCTGGTGTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                      CCAGCTCCTCCATGAACTCCAACACCCCGCTGGTGAGGATAACAACACGCCTCTCTCAA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGTGCACAAGCTGACCAAACGTATCCCCCTGCGGAGACAGGTAACAGTTTCGGCTGAGT 120
                                                                                                  AGATGGAGATGATGAAGATTGGGAAACACAAGAATATCATAAATCTTCTTGGAGCCT
                                                                                                                                                                   TGGCCGTGAAGATGTTGAAAGATGATGCCACAGAGAAAGACCTTTCTGATCTGGTGTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Contact:
Genome Re
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Korea Research Institute of Bioscience & Biotechnology 52 Ebeun-dong Yuseong-gu, Daejeon 305-333, South Korea Tel: +82-42-860-4470 Fax: +82-42-860-4409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   High quality sequence stop: 693.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Email: yongsung@mail.kribb.re.kr
Plate: 28 row: B column: 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Research Center
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note-*Organ: Stomach; Vector: pT773-Pac; Site_1: EcoRI; Site_2: NotI; The S22SNUI6 library was contributed by the Soares laboratory and it was constructed as described by Bonaldo, M.F., Lennon, G. and Soares, M.B. (1996), Genome Research 6(9): 791-806. RNA was prepared from harvested cells of SNU-16 culture. SNU-16 cell was obtained from Korean Cell Line Bank (KCLB). SNU-16 was established from ascitic fluids of Korean patients by Park J.G. et al. (1990), Cancer Res 50: 2773-2780."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kim YS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /clone="S22SNU16n1-28-B10"
/clone_lib="S22SNU16n1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /cell_type="Lymphoblast-like"
/cell_line="SNU-16"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /tissue_type="Ascites"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /sex="F"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15.9%;
99.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 680.4; DB 14; Length Pred. No. 8.6e-134;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
2053
                                                                                                                                                                                                    1873
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60
                                                                                                  480
                                                                                                                                                                   420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
```

```
BASE CO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 9
AI433805/c
    Š
                                             В
                                                                               Q
                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 759; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                               3463 TAACTAGTTATCAGATCCTTTGAAAAGAGAATATTTACAATATATGACTAATTTGGGGGAA 3522
                                                                                                                                                                                                                                                                                                                 COUNT
                                                                                                                      661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9
CTAAATGCCCCATATTAAAAGAACTCATTCATAGGAAGGTGTTTCATTTTGGTGTGCAAC 3642
                                                                AATGAAGTTTTGATTTATTTGTGTTTAAATGCTGCTGTCAGACGATTGTTCTTAGACCTC 3582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGGAGTACTTGGCTTCCCAAAA 2135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAAAGAGGTTTGAATTATTTGTGGTTAAAAGGCGGCTGTCAGCGA--TGGTTCTAGCCCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGGAGTACTTGGCTTCCCAAAA 682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tumor Gene Index
Unpublished (1997)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
This clone is available royalty-free through LLNL;
IMAGE Consortium (info@image.llnl.gov) for further i
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalla; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 822)

NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AI433805 822 bp mRNA linear EST 30-MAR-1999 th81fll.xl Soares_NhHMPu_Sl Homo sapiens cDNA clone IMAGE:2125101 3's similar to gb:M87770 FIBROBLAST GROWTH FACTOR RECEPTOR 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Insert Length: 1043 Std Er:
Seq primer: -40UP from Gibco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AI433805.1 GI:4291750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AI433805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRECURSOR (HUMAN);, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               human.
                                                                                                                                                                                                                                                                                                               248
                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            quality sequence stop: 436.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                      /note-*Organ: mixed (see below); Vector: pT7T3D-Pac (Pharmacia) with a modified polylinker; Site_1: Not I; Site_2: Eco RI; Equal amounts of plasmid DNA from three normalized libraries (melanocyte 2NbHM, pregnant uterus NbHPU, and fetal heart NbHH19W) were mixed, and ss circles were made in vitro. Following HAP purification, this DNA was used as tracer in a subtractive hybridization reaction. The driver was PCR-amplified cDNAs from pools of 5,000 clones made from the same 3 libraries. The pools consisted of I.M.A.G.E. clones 260232-265223, 340488-345479, and 484488-489479.*
                                                                                                                                                                                                                                                                                                               ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /tissue_type="Pooled human melanocyte, fetal heart,
pregnant uterus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /lab_host-"DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /clone="IMAGE:2125101"
/clone_lib="Soares_NhHMPu_S1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Homo sapiens"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. .822
                                                                                                                                                                                                                             15.8%;
93.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Std Error: 0.00
                                                                                                                                                                                                                           Score 675.6; DB 9; Pred. No. 8.7e-133;
                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .gov) for further information.
                                                                                                                                                                                                                                              Length 822;
                                                                                                                                                                                                          Indels
                                                                                                                                                                                                       10;
                                                                                                                                                                                                       Gaps
                                           699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             600
                                                                                                                                                                                                       5
```

```
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                       RESULT 10
BM970064/c
                                                                                            COMMENT
                                                                                                                                                                                                                                                 SOURCE
                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                  KEYWORDS
                                                                                                                                                                                                                                                                                 VERSION
                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                             rocus
                                                                                                                                                                                                                                    ORGANISM
                                                                                                         MEDLINE
                                                                                                                           JOURNAL
                                                                                                                                                       TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3643
                                                                                                                                                                                                                                                                                                                                                                                                                                                    4241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         399
                                                                                                                                                                                                                                                                                                                                                                                                                       39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTCTTAAAAGATGCCTTAATCCATTCCTTGAGGACAGACCTTAGTTGAAATGATAGCAGA 3762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGATTACACTGATCTTATGTGTTACAAAATTGGAGAAAGTATTTAATAAAACCTGTTAA 4180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTTAGGATCTTCAAGTCCCATCATAGAAAATTGAAACACAGAGTTGTTCTGCTGATAGTT 3940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TG-ATTCTCTTCAGTGAATTTTGATAATGGCTTCCAGACTCTTT-GCGTTGGAGACGCCT 3880
                                                                                                                                                                                                                                                                                                                                                                                                                     GTCCCGCAACTTAAAAAAAAAAAAAAAAA 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAAAGATCCAGCCTCATACCTACATCAGACAAAATATCGCCGTTGTTCCTGTACTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAAAGATCCAGCCTCATACCTACATCAGACAAAATATCGCCGTTGTTCCTTCTGTACTAA 4060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTGGGGATACGTCCATCTTTTAAGGGATTGCTTTCATCTAATTCTGGCAGGACCTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATGTGCTTCTCTGGCAGCTGGCCTTCTGCTTCTGAGTTGCACATTAATCAGATTAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCTGTCATTACGTCAACGCAACGTCTAACTGGACTTCCCCAAGATAAATGGTACCAGCGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTAAAGCCCCCATATTAAAA-AACTCATTCATAGGAAGGTGTTCCATTTGGGTGTGCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTCACGCAACTTAAAAAAAAAAAAAAAA 4268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGATTACACTGATCTTATGTGTTACAAAATTGGAGAAAGTATTTAATAAAACCTGTTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGTATTGTGTTTTTGCTTTTGGAAACACCCCACTCTTTGCAATTAGCCGTGCAAGATGAATG 4120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTGGGGATACGTCCATCTTTTTAAGGGATTGCTTTCATCTAATTCTGGCAGGACCTCACC 4000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCTGTCATTACGTCAACGCAACGTCTAACTGGACTTCCCCAAGATAAATGGTACCAGCGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGTATTGTGTTTTGCTTTGGAAACACCCCACTCACTTTGCAATAGCCGTGCAAGATGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATGTGCTTCTCTGGCAGCTGGCCTTCTGCTTCTGAGTTGCACATTAATCAGATTAGCC
           University of Iowa
2024 University of Iowa
Tel: 319 356 4866
Fax: 319 356 7171
                                                                                                                                                                                                                                                                                                         BM970064 690 bp mRNA linear EST 21-M. UI-CF-EC1-abu-b-07-0-UI.sl UI-CF-EC1 Homo sapiens cDNA clone UI-CF-EC1-abu-b-07-0-UI 3', mRNA sequence.
                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                  EST
   Emaj.1:
                                                                                         Contact: McCray, PB
                                                                                                                                         discovery
                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                               вм970064.1 GI:19587651
                                                                            McCray Lab
                                                                                                                                                      Normalization and subtraction: two
                                                                                                                                                                       Bona
                                                                                                                                                                                                  Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
                                                                                                                                                                      (bases 1 to 690)
naldo,M.F., Lennon,G. and Soares,M.B.
 paul-mccray@ulowa.edu
                                                                                                                       Res. 6 (9),
                                                                                                                         791-806 (1996)
                                              Med
                                              Labs, Iowa
                                                                                                                                                      approaches
                                            City,
                                              IA 52242,
                                                                                                                                                      ö
                                                                                                                                                      facilitate
                                                                                                                                                                                                      Homo
                                                                                                                                                                                                                                                                                                                                            21-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              280
                                                                                                                                               δ
                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                       δ
 밁
                       δÃ
                                                           밁
                                                                                      õ
                                                                                                                       밁
                                                                                                                                                                                    ₽
                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                            몽
                                                                                                                                                                                                                                                                                                                                                                         B
                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches 678;
                            3060
                                                                                                                                                                                                                                                                               2820
                                                                                                                                                                                                                                                                                                                                          2760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNT
                                                                                                                                                                                                                                                                                                                                                                                                     2700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                      2940
 330
                                                                                                                                                                                    510
                                                                                                                                                                                                                                                 570
                                                                                                                                                                                                                                                                                                             630
                                                                                                                                                                                                                                                                                                                                                                         690
TTCTGGAGCAGTGGACTGCCACAAGCCACCATGTAACCCCTCTCACCTGCCGTGCGTTCT 2999
                                                                                                                                                                                                                                                             CTTGTTGTCTCCACTTGTATATATGGATCAGAGGAGTAAATAATTGGAAAAGTAATCAGC 2879
                                                                                                                                                                                                                                                                                                                         CCAAACAGGACAGTGGGAACCTAGGTACACTGAGCAGGGAGACCATGCCTCCCAGAG 2819
                                                                                       ATATGTGTAAAGATTTATACAGTTGAAAACTTGTAATCTTCCCCAGGAGGAGAAGAAGGT 2939
                                                                                                                                                                                                                                                 CTTGTTGTCTCCACTTGTATATATGGATCAGAGGAGTAAATAATTGGAAAAGTAATCAGC
                                                                                                                                                                                                                                                                                                            CCAAACAGGACAGCAGTGGGAACCTAGCTACACTGAGCAGGGAGACCATGCCTCCCAGAG
```

밁

Ş В

δÔ 밁 Ş

밁

451

511

571

Ş DЪ 당 ş

οy

Š В õ

В

Š. рb

Ъ

Вþ

Ş 5

9

```
The following repetitive elements were found in this cDNA The following repetitive elements were found in this cDNA sequence: 1-46, >AT_richi+Low_complexity (matched compliment) 216-266, >(TA)n#Simple_repeat Sequence: M13 FORWARD POLYA-YOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Tissue Procurement: Dr. M. J. Welsh, University of Iowa CDNA Library preparation: Dr. M. Bento Soares, University of Iowa CDNA Library Arrayed by: Dr. M. Bento Soares, University of Iowa DNA Sequencing by: Dr. M. Bento Soares, University of Iowa Clone Distribution: Researchers may obtain clones from Research
                                                                                                                                          Similarity
                                                                                                                                                                                                                                                             210
                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                    /dev_stage="Adult and Fetal"

//dev_stage="Adult and Fetal"

//dev_stage="Adult and Fetal"

//dev_stage="Adult and Fetal"

//note="Organ: Lung; Vector: pT/T3-Pac (Pharmacia) with a modified polylinker; Site_1: EcoR I; Site_2: Not I; urcF-EC1 is a normalized cDNA library containing the following tissue(s): Normal lung from adult and from fetal day 64, day 87, week 19 and week 42. The library was constructed according to Bonaldo, Lennon and Soares, Genome Research, 6:791-806, 1996. First strand cDNA synthesis was primed with an oligo-dT primer containing a Not I site Double stranded cDNA was ligated to an EcoR I adaptor, digested with Not I, and cloned directionally into pT/T3-Pac vector. The oligonucleotide used to prime the synthesis of first-strand cDNA contains a library tag sequence that is located between the Not I site and the (dT)18 tail. The sequence tag for this library is
                                                                                                                                                                                                                                                             ď
                                                                                                                                                                                                                                                       TAG_SEQ-AAGTGCTTAC"
136 c 120 g
                                                                                                                                                                                                                                                                                                                                            TAG_TISSUE-Normal Lung
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Homo sapiens"
/db_xref="taxon:9666"
/clone="UI_CF-ECI-abu-b-07-0-UI"
/clone_11b="UI-CF-ECI"
                                                                                                                                                                                                                                                                                                                                                                          TAG_LIB=UI-CF-EC1
                                                                                                                                                                                                                                                                                                                                                                                                           AAGTGCTTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /tissue_type="Lung"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ocation/Qualifiers
                                                                                                                                          15.8%;
99.3%;
                                                                                                               0;
                                                                                                            Score 675; DB 14;
Pred. No. 1.2e-132;
0; Mismatches 5;
                                                                                                                                                                                                                                                          224
                                                                                                                                                                                                                                                                                                                                               Epithelial
                                                                                                                                                                                                                                                          ٠
                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                  Cells
                                                                                                               Indels
                                                                                                                                                                         690;
                                                                                                                                                                                                                                                                                                                                               Tissue
                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                  nos 369-371
                                                                                                               Gaps
                                                                                                               0
```

```
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
ACCESSION
VERSION
                      Ş
                                                   ₽
                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 11
AV726725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ŷ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q
  8
                                                                                                                                                    BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FOCUS
                                                                                               Query Match
Best Local Similarity
Matches 684; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                           3159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3180
                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             270
  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          90
                                                   _
                                                            CACAAATGCAGTATATAGAGTGCTGGATGTATGTAAATATTTCAAATTATGTATAAATAT 3158
                                             CACAAATGCATTATATAGGTGCTGGATGTATGTAAATATATTCAAATTATGTATAAATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATATTATATATTACAAGGAGTTATTTTTTTGTATTGATTTTAAATGGATGTCCCAATGCA 3218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTGGTAATATACAAAACAATTAA 3382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTTTTAATAGCTATTTGCTAAATGCTGTTCTTACACATAATTTCTTAATTTTCACCGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTGGTAATATACAAAACAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTTTTAATAGCTATTTGCTAAATGCTGTTCTTACACATAATTTCTTAATTTTCACCGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AV726725
AV726725
AV726725
                                                                                                                                                                                                                                                                                                                                          Unpublished (2000)
Contact: Zeguang Han
Chinese National Human Genome Center at Shanghai
351 Guo Shoujing Road, Zhangjiang Hi-Tech Park,
201203, P. R. China
Tel: 86-21-50801919(ex.45)
Fax: 86-21-50801922
                                                                                                                                                                                                                                                                                                                                                                                                                                           Gu,Y., Peng,Y., Song,H., Huang,Q., Yang,Y., Gao,G., Xiao,H., Xu,X., Li,N., Qian,B., Liu,F., Qu,J., Gao,X., Cheng,Z., Xu,Z., Zeng,L., Xu,S., Gu,W., Tu,Y., Jia,J., Fu,G., Ren,S., Zhong,M., Lu,G., Hu,R., Chen,J., Chen,Z. and Han,Z.
                                                                                                                                                                                                                                                                                                 Email: hanzg@chgc.sh.cn
This clone is available at CI
Location/Qualiflers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 712)
                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens cDNA HTC clones
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AV726725.1
                                                                                                                                                                 224
                                                                                                  Conservative
                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HTC Homo sapiens cDNA clone
                                                                                                                                                                           /note="Vector: pBluescript sk(-); Site_1:
xhor"
                                                                                                                                                                                                                                      /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="HTCBOB07"
/clone_lib="HTC"
                                                                                                                                                                                                               /tissue_type="Hypothalamus"
/dev_stage="Adult"
                                                                                                                                                                                                    'lab_host="SOLR"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GI:10836146
                                                                                                            15.7%;
96.7%;
                                                                                                                                                                 108 c
                                                                                                  0
                                                                                                            Score 670.8; DB 10; Pred. No. 9.3e-132;
                                                                                                                                                               117
                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        712 bp
                                                                                                                                                              9
                                                                                                                                                                                                                                                                                                               CHGC
                                                                                                                                                              262 t
                                                                                                                                                                                                                                                                                                                 ij
                                                                                                                                                                                                                                                                                                               Shanghai.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             mRNA linear
ne HTCBOB07 5',
                                                                                                                                                                                                                                                                                                                                                                             Park, Pudong,
                                                                                                                                                              1 others
                                                                                                Indels
                                                                                                                       Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EST 17-OCT-2000 mRNA sequence.
                                                                                                                        712;
                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                             Shanghai
                                                                                               Gaps
                                                                                                                                                                                       Site_2:
                                                60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          211
                                                                                                0;
```

```
몽
                         Š
                                                밁
                                                                  οy
                                                                                            g
                                                                                                                 Ş
                                                                                                                                         밁
                                                                                                                                                             δÃ
                                                                                                                                                                                     B
                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                      QΥ
                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                            맑
                                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                       당
                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                3579
                                                                                                                                                                                                             3519
                                                                                                                                                                                                                                                          3459
                                                                                                                                                                                                                                                                                                                                                                                             3279
                                                                                                                                                                                                                                                                                                                                                                                                                                              3219
                                                                    3699
                                                                                                                                                                                                                                                                                                        3399
                                                                                                                                                                                                                                                                                                                            241
   661
                                                                                           541
                                                                                                                                         481
                                                                                                                                                                                      421
                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                       121
CAAAATGTGCTTCTTTCTGCAACTTGGCCTTTGCTTCAAGTGACA
                                                         CGTCCTCTTAAAAGATGCCTTAATCCATTCCTTGAGGACAGCCTTAGTTGAAATGATAG
                                                                                                                                                                                   GGAAAATGAAGTTTTGATTTAGTTTGTGTTTAAATGCTGCTGTCAGACGATTGTTCTTAGA
                                                                                                                                                                                                                               GACTTAACTAGTTATCAGATCCTTTGAAAAGAGAATATTTACAATATATGACTAATTTGG
                                                                                                                                                                                                                                                                             CCTAGAAAATTGGTCTCTCTTTTTTAATAGCTATTTGCTAAATGCTGTTCTTACACATA
                      CAGAATGTGCTTCTCTCTGGCAGCTGGCCTTCTGCTTCTGAGTTGCA 3805
                                                                                                       CAACCCTGTCATTACGTCAACGCAACGTCTAACTGGACTTCCCAAGATAAATGGTACCAG
                                                                                                                                                             CCTCCTAAATGCCCCCATATTAAAAGAACTCATTCATAGGAAGGTGTTTCATTTTGGTGTG
                                                                                                                                                                                                                                                                                                                           ATTTCTTAATTTTCACCGAGCAGAGGTGGAAAAATACTTTTGCTTTCAGGGAAAATGGTA 3338
                                             CGTCCTCTTAAAAGATGCCTTTATCCATTTCCTGAGGACAGACCTTAATTGAAATGATAG
                                                                                          CAACCCTGTCATTACGTCAACGCAACGTCTAACTGGACTTNCCAAGATAAATGTTACCAG
                                                                                                                                       CCTCCTAAATGCCCCCATATTAAAAGAACTCATTCATAGGAAGGTGTTTCATTTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                  TAACGTTAATTAATAAATTGGTAATATACAAAACAATTAATCATTTATAGTTTTTT
                                                                                                                                                                                                                                                                                                                                                                        ATTTCTTAATTTTCACCGAGCAGAGGTGGAAAAATACTTTTGCTTTCAGGGAAAATGGTA
  707
                                                                    3758
                                                                                                                                                                                                          3578
                                                                                                                                                                                                                                                                                                                                                  3398
                                                                                                                 3698
                                                                                                                                                             3638
                                                                                                                                                                                                                                                      3518
                                                                                                                                                                                                                                                                                                    3458
                                              660
                                                                                           600
                                                                                                                                      540
                                                                                                                                                                                    480
                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                                                                     180
```

SOURCE ORGANISM VERSION KEYWORDS RESULT 12 BQ575816/c COMMENT DEFINITION REFERENCE ACCESSION rocas AUTHORS TITLE JOURNAL cDNA Library preparation: Dr. M. Bento Soares, University of Iowa CDNA Library Arrayed by: Dr. M. Bento Soares, University of Iowa DNA Sequencing by: Dr. M. Bento Soares, University of Iowa Clone Distribution: Clone distribution information can be obtained from Dr. M. Bento Soares, bento-soares@uiowa.edu
The following repetitive elements were found in this cDNA sequence: 1-6, >AT_rich#Low_complexity (matched compliment) 217-257, >(TA)n#Simple_repeat BQ575816 693 bp mRNA UT-H-EZI-bbh-g-ll-0-UI.sl NCI_CGAP_Ch2 + UI-H-EZI-bbh-g-ll-0-UI 3', mRNA sequence BQ575816 BQ575816.1 GI:21479133 EST. Contact: Robert Strausberg, Ph.D. Email: cgapbs-r@mail.nih.gov Tissue Procurement: Dr. Steven Gitelis/ Rush Presbiterian, Dept. Unpublished (1997) NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap. National Cancer Institute, Cancer Genome Ana Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; 1 (bases 1 to 693) Homo sapiens Seq primer: Orthoapedics Tumor Gene Index human FORWARD sequence. Genome Anatomy Homo Hominidae; linear sapiens Project (CGAP), Euteleostomi; cDNA clone EST 19-JUN-2002 Homo of

FEATURES

```
밁
                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     рь
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ър
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               453
153
                                                                                                                                                                                                                                                                                       273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGCTTGTTGTCTCCACTTGTATATATGGATCAGAGGAGTAAATAATTGGAAAAGTAATCA 2877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCCCAAACAGGACAGCACTGGGAACCTAGCTACACTGAGCAGGGAGACCATGCCTCCCAG 574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCCCAAACAGGACAGCACTGGGAACCTAGGTACACTGAGCAGGGGAGACCATGCCTCCCAG 2817
                                                                                                                                     AGTTATTTTTGTATTGATTTAAATGGATGTCCCAATGCACCTAGAAAATTGGTCTCTC 3237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTTTCTGGAGCAGTGGACTGCCACAAGCCACCATGTAACCCCTCTCACCCTGCCGTGCGTT 2997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCATATGTGTAAAGATTTATACAGTTGAAAACTTGTAATCTTCCCCCAGGAGGAGAAGAAG 2937
TTTTTTTAATAGCTATTTGCTAAATGCTGTTCTTACACATAATTTCTTAATTTTCACCGA
                             TTTTTTTAATAGCTATTTGCTAAATGCTGTTCTTACACATAATTTTCTTAATTTTCACCGA 3297
                                                                                                                                                                                                                                                                                   TAATAATTGGAGAAGATTTATGTCAGCACACACTTACAGAGCACAAATGCAGTATATAGG 3117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTTTCTGGAGCAGTGGACTGCCACAAGCCATGTAACCCCTCTCACCTGCCGTGCGTA 394
                                                                                                                                                                                                                                                                                                                                                          GCATATGTGTAAAGATTTATACAGTTGAAAACTTGTAATCTTCCCCAGGAGGAGAAGAAG 454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGCTTGTTGTCTCCACTTGTATATATGGATCAGAGGAGTAAATAATTGGAAAAGTAATCA 514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          was constructed according to Bonaldo, Lennon and Soares, Genome Research, 6:791-806, 1996. First strand cDNA synthesis was primed with an ollygo-dT primer containing a Not I site. Double stranded cDNA was ligated to an EcoR I adaptor, digested with Not I, and cloned directionally into pT/T3-Pac vector. The oligonucleotide used to prime the synthesis of first-strand cDNA contains a library tag sequence that is located between the Not I site and the (dT)18 tail. The sequence tag for this library is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /lab_host-"DH10B (Life Technologies)"
/note-"Organ: Left Pelvis; Vector: p7773-Pac (Pharmacia)
/note-"Organ: Left Pelvis; Vector: p7773-Pac (Pharmacia)
/note-"Organ: Left Pelvis; Vector: p7773-Pac (Pharmacia)
/note-"Organ: Left Pelvis; Vector: EcoR I; Site_2: Not I;
/note-"Organ: Left Pelvis; Vector: Left Packet II;
/note-"Organ: Left Pelvis; Vector: Left Pelvis; 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TAG_LIB-UI-H-EZ1
TAG_TISSUE-grade-2-chondrosarcoma
TAG_TISSUE-graderCT
TAG_SE0-ATCTAATATC"
135 c 123 g 223 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /db_xref="taxon:9606"
/clone="UI-H-EZ1-bbh-g-11-0-UI"
/clone_1ib="NCI_CGAP_Ch2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /tissue_type="Chondrosarcoma Grade II"
/dev_stage="Adult"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IGATCACGC:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 666; DB 14; Length 693; Pred. No. 9.7e-131; O; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
94
                                                                                                                                                                                                                                                                                                                                                                                                                                    274
```

```
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 13
BI661597
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
Ş
                                              밁
                                                                                      Ş
                                                                                                                                      밁
                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                             ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                  BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                            Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                    1340 GCTTGACAGTTCTGCCAGCGCCTG-GAAGAGAAAAGGAGATTACAGCTTCCCCAGACTAC 1398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3298 G-CAGAGGTGGAAAAATACTTTTTGCTTTTCAGGGAAAATGGTATAACGTTAATTTAATT 3356
1518 GCACAAGCTGACCAAACGTATCCCCCTGCGGAGACAGGTAACAGTTTCGGCTGAGTCCAG 1577
                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ω
ω
                                                                                                                                                                                                                               ,
                                                                                                                                                              CTGGAGATAGCCATTTACTGCATAGGGGTCTTCTTAATCGCCTGTATGGTGGTAACAGTC 1458
                                                                     ATCCTGTGCCGAATGAAGAACACGACCAAGAAGCCAGACTTCA-GCAGCCAGCCGGCTGT 1517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAATTGGTTATATACAAAACAAAAAA 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAATTGGTAATATACAAAACAATTAA 3382
                                              CTGGAGATAGCTATTTACTGCATAGGGGTCTTCTTAATCGCCTGCATGGTGGTGACAGTC 120
                                                                                                                                                                                                                             GGTTGACAGTTCTGCCAGCGCCTGATGAGAGAGAGGAGGAGATCACGGCTTCCCCAGATTAT 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCCAGAGGTGGAAAAATACTTTTGCTTTCAGGGAAAATGGTATAACGTTAATTTATTAAT 34
                                                                                                                                                                                                                                                                                                                     767;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-rémail.nih.gov
Tissue Procurement: Lothar Hennighausen Ph.D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 850)
NIH-MGC http://mgc.ncl.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BI661597 850 bp mRNA linear EST 12-SEP-603305723F1 NCI_CGAP_Mam4 Mus musculus cDNA clone IMAGE:5351597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
Plate: LLAM11893 row: m column: 06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BI661597.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  High quality sequence stop: 818.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ph.D
                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            house mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CDNA Library Preparation: Life Technologies, Inc. CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLN DNA Sequencing by: Incyte Genomics, Inc. Consortium (Clone distribution: MGC clone distribution information
                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                           /note-"Organ: mammary: Vector: pCMV-SPORT6; Site_1: SalI Site_2: NotI: Cloned unidirectionally. Primer: Oligo dT Library constructed by Life Technologies. Investigators providing samples: Lothar Hennighausen/Priscilla Furth, NIH Reference for transgenic model: Li et al., Cell Grow and Differentiation 7, 3-11 (1996)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /tissue_type="tumor, gross tissue"
/dev_stage="5 months"
/lab_host="bH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Mus musculus"
/strain="NMRI"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /clone_lib="NCI_CGAP_Mam4"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /db_xref="taxon:10090"
/clone="IMAGE:5351597"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 j. .850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GI:15575833
                                                                                                                                                                                                                                                                                                                                          15.6%;
                                                                                                                                                                                                                                                                                                                     <u>.</u>
                                                                                                                                                                                                                                                                                                                Score 664.6; DB 13;
Pred. No. 1.9e-130;
D; Mismatches 79;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Consortium (LLNL)
                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Priscilla Furth
                                                                                                                                                                                                                                                                                                                     Ģ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Cell Growth
                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                     5
```

```
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                 ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                       RESULT 14
B1661662
                                                                                                                                                                                                                                                                                                                     Š
                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                         COMMENT
                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                2116
                                                                                                                                                                                                                                                                                                                                                                                                                                                     1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                   840
                                                                                                                                                                                                                                                                                                                                            780
                                                                                                                                                                                                                                                                                                                                                                                                                                661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                         CACAGGATGGGCCTCTCTATGTCATAGTTGAGTATGCCTCTAAAGGCAACCTCCGAGAAT 1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTCCCCAGAGATAAGCTGACGCTGGGCAAACCCCTGGGGGAAGGTTGCTTCGGGCAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTCCTCCATGAACTCCAACACCCCGCTGGTGAGGATAACAACACCCCCTCTCTTCAACGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACAGAAAACAA 850
                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCTCCGAGCCCGGAGGCCACCCGGGATGGAGTACTCCTATGACATTAACCGTGT-TCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGCAGGATGGACCTCTACGTCATAGTTGAATATGCATCGAAAGGCAACCTCCGGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGGAGATGATGATGATTGGGAAACATAAGAACATTATCAACCTCCTGGGGGCCTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGTGAAGATGTTGAA-AGATGATGCCACAGAGAAAGACCTTTCTGATCTGGTGTCAGAGA 1876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGTCATGGCTGAAGCAGTGGGAATCGATAAAGACAAACCCAAGGAGGCGGTCACCGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGACACCCCATGCTGGCAGGGGTCTCCGAGTATGAACTTCCAGAGGACCCAAAATGGGA 1697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTCCTCCATGAACTCCAACACCCCGCTGGTGAGGATAACAACGCGTCTGTCCTCAACAGC
                                                                                                                                                                                                                                                                                                                      ACAGAAAACAA 2186
                                                                                                                                                                                                                                                                                                                                                                                                                              ACCTCCGAGCCCGGAGGCCA-CTGGCATGGAGTACTCCTATGACATTAACCGTGTCCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGTGAAGATGTTGAACAGATGATGCCACAGAGAAGGACCTGTCTGATCTGGTATCAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGTCATGGCGGAAGCAGTGGGAATTGACAAAGACAAGCCCCAAGGAGGCGGTCACCGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTTTCCAAGAGATAAGCTGACACTGGGCAAGCCCCTGGGAGAAGGTTGCTTTGGGCAAGT 1757
                                                      Email: cgapbs-r@mai
Tissue Procurement:
Ph.D.
                                                                                                                                                                                                                            BI661662
603305601F1 NCI_CGAP_Mam4
                                                                           Contact: Robert Strausberg, | Email: cgapbs-r@mail.nih.gov
                                                                                                         Mammalia; Eutheria; Rodentia; Sciurognath
1 (bases 1 to 787)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian
                                                                                                                                                     Mus musculus
Eukaryota; Metazoa;
                                                                                                                                                                                        EST
                                                                                                                                                                                                            mRNA sequence.
BI661662
                                                                                                 Unpublished (1999)
                                                                                                                                                                                                  BI661662.1
 CDNA Library Preparation: Life Technologies, Inc. cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLN DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution information found through the I.M.A.G.E. Consortium/LLNL at:
                                                                                                                                                                             house mouse.
                                                                                                                                                                                                  GI:15575898
                                                                                                                                            Chordata;
Rodentia;
                                                                   Lothar
                                                                                                                                                                                                                                787 bp
Mus mu
                                                                  Hennighausen
                                                                                      Ph.D
                                                                                                                                          Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                 musculus
                                                                                                                                                                                                                                           mRNA
                                                                                                                                                                                                                                CDNA
                                                                  Ph.D.,
                                                                                                            Gene
                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                               linear EST 12-SEP-2001 clone IMAGE:5351304 5',
                                                                                                            Collection
                                                                  Priscilla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1817
                                                                                                                                                                                                                                                                                                                                                                                                                                                    2055
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
             be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BASE CO
                 δÃ
                                                           Q
                                                                             ٠ <del>B</del>
                                                                                                     Qy
                                                                                                                               망
                                                                                                                                                 δÃ
                                                                                                                                                                         В
                                                                                                                                                                                           δÃ
                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                       Ωy
                                                                                                                                                                                                                                                             Ъ
                                                                                                                                                                                                                                                                                QΥ
                                                                                                                                                                                                                                                                                                         B
                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                      QΥ
                                                                                                                                                                                                                                                                                                                                                                                             Вb
                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
 ₽
                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 717; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1665
                      2325
                                                                                                           2205
                                                                                                                                                                                                                                         2025
                                                                                                                                                                                                                                                                                                                                                                          1845
                                                                                                                                                                                                                                                                                                                                                                                                                   1785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNT
                                                                                                                                                                                                                                                                                    1965
                                                                                                                                                                                                                                                                                                                               1905
                                                                                                                                                                          421
                                                                                                                                481
                                           601
                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ۳
CGATGTCTGGTCCTTCGGGGTGTTAATGTGGGAGATCTTTACTTTAGGGGGGCTCACCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       High
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  נם
```

```
CGAGTATGAGTTGCCAGAGGATCCAAAGTGGGAATTCCCCCAGAGATAAGCTGACGCTGGG 60
                                                                                                                        TGATGTCTGGTCCTTCGGGGTGTTAATGTGGGAGATCTTCACTTTAGGGGGGCTCGCCCTA
                                                GTCATGCACCTACCAGCTGGCCAGAGAGGCATGGAGTACTTGGCTTCCCAAAAATGTATTCA 2144
                                                                                                                                                                                                                                                                                                                                            GGAGTACTCCTATGACATTAACCGTGTCCCCGAGGAGCAGATGACCTTCAAGGACTTGGT
                                                                                                                                                                                                                                                                                                                                                             GGAGTACTCCTATGACATTAACCGTGTTCCTGAGGAGCAGATGACCTTCAAGGACTTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAAGAATATCATAAATCTTCTTGGAGCCTGCACACAGGATGGGCCTCTCTATGTCATAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAMACCCCTGGGGGAAGGTTGCTTCGGGCAAGTAGTCATGGCTGAAGCAGTGGGAATCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAAGCCCCTGGGAGAAGGTTGCTTTGGGCAAGTGGTCATGGCGGAAGCAGTGGGAATTGA 1784
                                                                                                                                                                                                                                 TCGAGATTTAGCAGCCAGAAATGTTTTGGTAACAGAAAACAATGTGATGAAAATAGCAGA 220
                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGAGTATGCCTCTAAAGGCAACCTCCGAGAATACCTCCGAGCCCGGAGGCCACCCGGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TAAGAACATTATCAACCTCCTGGGGGCCTGCACGCAGGATGGACCTCTCTACGTCATAGT
                                                                                                                                                                                                                                                                                                                                                                                                                  TGAATATGCATCGAAAGGCAACCTCCGGGAATACCTCCGAGCCCGGAGGCCACCTGGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Plate: LLAM11893 row: a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             http://image.llnl.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          quality sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note-*Organ: mammary; Vector: pCMV-SPORT6; Site_1: SalI; Site_2: NotI; Cloned unidirectionally. Primer: Oligo dT. Library constructed by Life Technologies. Investigators providing samples: Lothar Hennighausen/Priscilla Furth, NIH Reference for transgenic model: Li et al., Ceil Growth and Differentiation 7, 3-11 (1996).*

176 c 221 g 167 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /tissue_type="tumor, gross
/dev_stage="5 months"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /strain="NMRI"
/db_xref="taxon:10090"
/clone="IMAGE:5351304"
/clone_lib="NCI_CGAP_Mam4"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ity sequence stop:
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15.6%;
91.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 664; DB 13;
Pred. No. 2.5e-130;
0; Mismatches 70;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           column:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          787.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               tissue"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     <u>;</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                           2264
                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                            420
                                                    660
                                                                                      2324
                                                                                                                          600
                                                                                                                                                                                                                                                                                                                                                                              2084
                                                                                                                                                                                                                                                                                                                                                                                                                                                     2024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          120
                                                                                                                                                                                                                                                                     480
                                                                                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         300
```

```
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 15
BI853362
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
TITLE
   밁
                            Ş
                                                            밁
                                                                                        å
                                                                                                                         В
                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
                                                                                                                                                                                  Query Match
Best Local Sim
Matches 767;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                       1939
                                 2059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               721
   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   780
                                                             61
                                                                                                                         \vdash
CAGGATGGGCCTCTCTATGTCATAGTTGAGTATGCCTCTAAAGGCAACCTCCGAGAATAC 1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGGATGGACCTCTCTACGTCATAGTTGAATATGCATCGAAAGGCAACCTCCGGGAATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCCCACCA 787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCCAGCCA 2452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Lothar Hennighausen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mammalia; Eutheria: Rodentia; Sciurognathi; Muridae; Murinae; I (bases 1 to 852)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BI853362
603379944F1 NCI_CGAP_Mam4 Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         H1gh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              mRNA sequence.
BI853362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     found through the I.M.A.G.E. Consortium/LLNL http://lmage.llnl.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BI853362.1 GI:15994109
                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CDNA Library Preparation: Life Technologies, Inc. cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution information can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 touse mouse
                                                                                                                                                                                                                                                               231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   e: LLAM11988 row: g column: quality sequence stop: 850.
Location/Qualifiers
                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                         /notee "Organ: mammary Vector: pCMV-SPORT6; Site_1: Sall; Site_2: NotI; Cloned unidirectionally. Primer: Oligo dT. Library constructed by Life Technologies. Investigators providing samples: Lothar Hennighausen/Priscilla Furth, NIH Reference for transgenic model: Li et al., Cell Growth and Differentiation 7, 3-11 (1996)."
                                                                                                                                                                                                                                                                                                                                                                 /clone="IMAGE:5387938"
/clone_lib="NCI_CGAP_Mam4"
/tl8sue_type="tumor, gross tissue"
/dev_stage="5 months"
/lab_host="DH108"
                                                                                                                                                                                                                                                                                                                                                                                                                                               /strain="NMRI"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Mus musculus"
                                                                                                                                                                                                  15.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Chordata;
Rodentia;
                                                                                                                                                                                    0;
                                                                                                                                                                                  Score 663.2; DB 13;
Pred. No. 3.7e-130;
0; Mismatches 78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         852 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         musculus cDNA clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ph.D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                    Indels
                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Priscilla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EST 10-0CT-2001
IMAGE:5387938 5',
                                                                                                                                                                                                                  852;
                                                                                                                                                                                  7;
                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Furth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     əd
                                                                                                                                                                                  Ş
```

```
Ωy
                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş.₽
 밁
                       Ş
                                                     밁
                                                                          δ
                                                                                                         В
                                                                                                                                  Ş
                                                                                                                                                             밁
                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                        20
                                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                               ν
                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                       20
                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                           δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δõ
                                                                                2716
                                                                                                                                                                                        2598
                                                                                                                                                                                                                                                                                                                                                      2418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2119
 841
                                                     781
                                                                                                                                                               661
                                                                                                                                                                                                                   109
                                                                                                                                                                                                                                                                       541
                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
TCTCGAACAGTATTCACCTAGTTACCCTGACACAAGAAGTTCTTGTTCTTCAGGAGATGA
                                                                                                                                                                                                                                                                                                                                                                               ATAAACGGCAGTGTTAAAACATGAATG---ACTGTGTCTGCCTGTCCCC-AAACAGGACA 2771
                                                                                                                       TTCTGT-TTTTTCTCCAGACCCCATGCCTTACGAACCAT-GCCTTCCTCAGTATCCACAC
                                                                                                                                                                                                                                 AGACTTGGATCGAATTCTCACTCTCACACACCAATGAGGAATACTTGGACCTCAGCCAACC
                                                                                                                                                                                                                                                                       GATGAGGGATTGCTGGCATGCTGTACCCTCACAGAGACCCCACATTCAAGCAGTTGGTCGA
                                                                                                                                                                                                                                                                                    GATGAGGGACTGTTGGCATGCAGTGCCCTCCCAGAGACCCAACGTTCAAGCAGTTGGTAGA
                                                                                                                                                                                                                                                                                                                                        GCTGAAGGAAGGACACAGAATGGATAAGCCAGCCAACTGCACCAACGAACTGTACATGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTATTACAAAAAGACCACCAATGGGCGGCTTCCAGTCAAGTGGATGGCTCCAGAAGCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGAAAACAATGTGATGAAAATAGCAGACTTTTGGACTCGCCAGAGATATCAACAATATAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TACTTGGCTTCCC-AAAAATGTATTCGATCGAGATTTAGCAGCCAGAAATGTTTTTGGTAAC
                                                                                                         TTCTGTGTTTTCCTCCAGACCCCATGCCTTATGAACCCTGGTCTGCCTCAGTATCCACAC
                                                                                                                                                                                                                   AGACTTGGATCGAATTCTGACTCTCACAACCAATGAGGAATACTTGGATCTCACCCAGCC
                                                                                                                                                                                                                                                                                                                           GCTCAAAGAGGGACACAGGATGGACAAGCCCAACCAACTGCACCAATGAACTGTACATGAT
                                                                                                                                                                                                                                                                                                                                                                                                          GATCTTCACTTTAGGGGGGCTCGCCCTACCCAGGGATTCCCGTGGAGGAACTTTTTAAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTACTATAAAAAGACCACAAATGGGCGACTTCCAGTCAAGTGGATGGCTCCTGAAGCCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TACTTGGCTTCCCAAAAAATGTATCCATCGAGATTTGGCTGCCAGAAACGTGTTGGTAAC
                                                     ATAAACGGCAGTGTTTAAAACATTGAGTGAATTGTGTCTTCCTGTCCCCAAAACAGGACA
                                                                                                                                                               TCTCGAACAGTATTCTCCTAGTTACCCCGACAAGGAGCTCTGTGTCTTCAGGGGGACGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGAAAACAATGTGATGAAGATAGCAGACTTTCGCCCTGGCCAGGGATATCAACAACATAGA
                                                                                                                                                                                        2657
                                                                                                                                                                                                                                                                                                2537
                                                                                                                                                                                                                                                                                                                                                                                                                                                               2357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2237
                                                                                                                                    2715
                                                                                                                                                                                                                                              2597
                                                                                                                                                                                                                                                                     600
                                                                                                                                                                                                                                                                                                                                                    2477
                                                                                                                                                                                                                                                                                                                                                                                                          2417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2177
                                                                                                                                                                                                                   660
                                                                                                                                                                                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                                                                                               480
                                                                                                                                                                                                                                                                                                                                                                                                                                     420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
```

Search completed: December 11, 2002, 17:35:12 Job time: 3758 secs

```
Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Minimum DB seq length: 0
Maximum DB seq length: 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    December 11, 2002, 17:40:42; Search time 120 Seconds (without alignments)
13868.608 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IDENTITY_NUC Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           350425 seqs, 194966369 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-954-556-3
4268
                                                                                                                                                                                                                                                                                                                                                                                                                      Published_Applications_NA: *
: /cgn2_6/ptodata/1/pubpna/PCTUS_PUBCOMB.seq:*
: /cgn2_6/ptodata/1/pubpna/USO8_NEW_PUB.seq:*
: /cgn2_6/ptodata/1/pubpna/USO8_NEW_PUB.seq:*
: /cgn2_6/ptodata/1/pubpna/USO9_NEW_PUB.seq:*
0: /cgn2_6/ptodata/1/pubpna/USO9_PUBCOMB.seq:*
1: /cgn2_6/ptodata/1/pubpna/USO9_PUBCOMB.seq:*
1: /cgn2_6/ptodata/1/pubpna/USO_NEW_PUB.seq:*
2: /cgn2_6/ptodata/1/pubpna/USO_PUBCOMB.seq:*
3: /cgn2_6/ptodata/1/pubpna/USO_NEW_PUB.seq:*
4: /cgn2_6/ptodata/1/pubpna/USO_NEW_PUB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GenCore version 5.1.3 Copyright (c) 1993 - 2002 Compugen Ltd
                                                                                                                                                                                                                                                                 /cgn2_6/ptodata/1/pubpna/USO7_PUBCOMB.seq:*
/cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq:*
/cgn2_6/ptodata/1/pubpna/USO6_NEW_PUB.seq:*
/cgn2_6/ptodata/1/pubpna/USO6_PUBCOMB.seq:*
/cgn2_6/ptodata/1/pubpna/USO6_PUBCOMB.seq:*
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

		_		_	_			_		_	_	^	_	_		_		. 20
19 18	17	c 16	15	14	13	12	11	10	9	00	7		. 5	د.	ىي .	· N	· -	Result
20.6	20.6	20.8	20.8	20.8	21.2	21.4	21.4	21.6	21.8	21.8	21.8	22	22.4	22.6	22.6	23.4	24.2	Score
0. 5.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	Query
4 5	4.5	46	42	42	35	46	46	46	48	46	44	46	46	50	31	46	31	Length
12 12	10	10	10	9	9	10	10	10	9	10	10	10	10	10	10	10	10	BB
US-10-023-529-30 US-10-023-523-30	US-09-962-055-30	US-09-827-289-20	US-09-828-592-2	US-10-023-096-5	US-09-927-777A-72	US-09-827-289-24	US-09-827-289-20	US-09-827-289-26	US-09-864-785-3604	US-09-827-289-24	US-09-875-519A-13	US-09-827-289-22	US-09-827-289-21	US-09-815-343-1012	US-09-801-274-957	US-09-827-289-25	US-09-801-274-958	ID
•	30,	20,	Sequence 2, Appl	Sequence 5, Appl		Sequence 24, Appl	20,	~	3604,	Sequence 24, Appl	Sequence 13, A	Sequence 22, Ap	Sequence 21, Appl	Sequence 1012, Ap	~	Sequence 25, Appl	Sequence 958, App	Description

FILE REFERENCE: 469290-55

										O	c		a	ဂ	ဂ										
45	44	43	42	41	40	39	38	37	36	S	34	ω ω	32	31	30	29	28	27	26	25	24	23	22	21	20
19.6	19.6	19.6	19.6	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	20	20	20	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.6	20.6	20.6
0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
36	36	36	35	4 8	48	48	48	46	46	45	45	40	22	22	20	48	48	48	. 48	37	ა 5	32	48	48	48
9	9	9	9	9	9	9	9	10	10	10	10	10	10	10	10	10	10	10	9	9	9	10	9	9	9
US-10-090-035-25	US-10-047-593-6	US-09-950-933A-99	US-10-034-451-1	US-09-864-785-3499	US-09-864-785-3425	US-09-864-785-3338	US-09-864-785-3109	US-09-827-289-25	US-09-827-289-21	US-09-827-289-16	US-09-827-289-12	US-09-245-802-45	US-09-073-881-26	US-09-073-881-24	US-09-073-881-4	US-09-732-914-80	US-09-732-914-73	US-09-732-914-68	US-09-864-785-3578	US-09-996-634-144	US-09-880-887-19	US-09-465-802-32	US-09-864-785-3501	US-09-864-785-3472	US-09-864-785-3333
25		99		Sequence 3499, Ap	Sequence 3425, Ap	3338,	3109,	25,	21,	16,	12,		26,	24,	۸,	80,	Sequence 73, Appl	∌ 68,	3576		Sequence 19, Appl	Sequence 32, Appl	3501,	Sequence 3472, Ap	Sequence 3333, Ap

ALIGNMENTS

```
RESULT 1

US-09-801-274-958

Sequence 958, Application US/09801274

Patent No. US20020032319A1

GENERAL INFORMATION:

APPLICANT: Cargill, Michele
APPLICANT: Lander, Eric S.

APPLICANT: Lander, Eric S.

TITLE OF INVENTION: HUMAN SIGILE NUCLEOTIDE POLYMORPHISMS

FILE REFERENCE: 2825_209-001

CURRENT FILING DATE: 2001-03-07

PRIOR APPLICATION NUMBER: US/09/801,274

CURRENT FILING DATE: 2000-03-07

PRIOR APPLICATION NUMBER: US 60/206,129

INSERTAL INFORMATION:

APPLICANT: Abarzua, Patricio

ITILE OF INVENTION: Excension

TITLE OF INVENTION: Excension

TITLE OF INVENTION: Excension
```

0

```
Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-801-274-957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; OTHER INFORMATION: Description of Artificial Sequence: P1 primer ; OTHER INFORMATION: use in allele discrimination US-09-827-289-25
                                                                                                                                                                                                                                                            US-09-815-343-1012/c
                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-801-274-957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Watches 30; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: US 60/187,510
PRIOR FILING DATE: 2000-03-07
PRIOR APPLICATION NUMBER: US 60/206,129
PRIOR FILING DATE: 2000-05-22
NUMBER OF SEQ ID NOS: 1802
SOFTWARE: FBSESEQ for Windows Version 4.0
SEQ ID NO 957
LENGTH: 31
                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 80.6
Matches 25; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: U.S.
PRIOR FILING DATE: 2000-04-05
NUMBER OF SEQ ID NOS: 35
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 25
                                                                                                                                                                                                                   Sequence 1012, Application US/09815343 Patent No. US20010055596A1
                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 957, Application US/09801274 Patent No. US20020032319A1
          APPLICANT: Meagher, Madeleine
APPLICANT: Xu, Jiangchun
APPLICANT: King, Gordon E.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THERAPY AND
TITLE OF INVENTION: DIAGNOSIS OF COLON CANCER
FILLE REFERENCE: 210121.504
CURRENT APPLICATION NUMBER: US/09/815,343
CURRENT FILING DATE: 2001-03-22
NUMBER OF SEO ID NOS: 1556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Cargill, Michele
APPLICANT: Ireland, James S.
APPLICANT: Lander, Eric S.
APPLICANT: Lander, Eric S.
TITLE OF INVENTION: HUMAN SINGLE NUCLEOTIDE POLYMORPHISMS
FILE REFERENCE: 2825.2009-001
CURRENT APPLICATION NUMBER: US/09/801,274
CURRENT FILING DATE: 2001-03-07
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/827,289
CURRENT FILING DATE: 2001-04-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                                                                                                                                              2453 ACTGCACCAACGAACTGTACATGATGATGAG 2483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    46
                                                                                                                                                                                                                                                                                                                                      1 ACTGCACACGACCYGTACATGATCATGCG 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                        0.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 23.4; DB 10;
Pred. No. 1.5e+04;
                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 22.6; DB 10
Pred. No. 1.8e+04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/194843
                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         46;
                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      for
                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
```

```
US-09-827-289-22
                                                                                                                                                                                                                                                                                                                                                      US-09-827-289-22/c

: Sequence 22, Application US/09827289

; Patent No. US20020009716A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; OTHER INFORMATION: Description of Artificial Sequence: OTHER INFORMATION: use in allele discrimination US-09-827-289-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; ORGANISM: Homo sapien US-09-815-343-1012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-827-289-21/c
                                                                                      SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 22
LENCTH: 46
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: PatentIn Ver.
SEQ ID NO 21
LENGTH: 46
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 29; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 21, Application US/09827289 Patent No. US20020009716A1
                                                                                                                                                            APPLICANT: Abarzua, Patricio
TITLE OF INVENTION: PROCESS for Allele Discrimination Using
TITLE OF INVENTION: Extension
FILE REFERENCE: 469290-55
CURRENT APPLICATION NUMBER: US/09/827,289
CURRENT FILING DATE: 2001-04-05
PRIOR APPLICATION NUMBER: U.S. 60/194843
PRIOR FILING DATE: 2000-04-05
NUMBER OF SEQ ID NOS: 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/827, 289 CURRENT FILING DATE: 2001-04-05 PRIOR APPLICATION NUMBER: U.S. 60/194843 PRIOR FILING DATE: 2000-04-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR FILING DATE: 2000-04-05
NUMBER OF SEQ ID NOS: 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: Process for Allele Discrimination Using Primer TITLE OF INVENTION: Extension FILE REFERENCE: 469290-55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Abarzua,
               OTHER INFORMATION: Description of Artificial Sequence: OTHER INFORMATION: use in allele discrimination
                                                    ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity 68.9 hes 31; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    45 GAGAATAGAAATGAAAAAAAAAAAAAAAAAAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Patricio
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 22.6; DB 10
Pred. No. 2.3e+04;
0; Mismatches 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 22.4; DB 10;
Pred. No. 2.5e+04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length
                                  Ρ1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     P]
                                  primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
```

Query Match Best Local Similarity

0.5%;

Score 22; DB 10; Pred. No. 3.1e+04;

Rel

```
US-09-864-785-3604; Sequence 3604, Application US/09864785
                                                                                                                                                                                                            ; OTHER INFORMATION: Description of Artificial Sequence: OTHER INFORMATION: use in allele discrimination US-09-827-289-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                       RESULT 9
                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-827-289-24/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-875-519A-13/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-875-519A-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/09/875,519A
CURRENT FILING DATE: 2001-06-06
PRIOR APPLICATION NUMBER: PCT/GB97/00603
PRIOR FILING DATE: 1997-03-04
NUMBER OF SEQ ID NOS: 35
SOFTMARE: Patentin Ver. 2.0
SEQ ID NO 13
                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 35
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 24
                                                                                                                                              Matches
                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 24, Application US/09827289 Patent No. US20020009716A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 13, Application US/09875519A Patent No. US20020068059A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: Process for Allele Discrimination Using Primer TITLE OF INVENTION: Extension FILE REFERENCE: 469290-55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Farries, Timothy C.
APPLICANT: Harrison, Richard A.
TITLE OF INVENTION: Down Regulation Resistant C3 Convertase
FILE REFERENCE: 4-30443/A/IMU/PCT
                                                                                                                                                                                                                                                                                                                                                                                               CURRENT FILING DATE: 2001-04-05
                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: U.S. PRIOR FILING DATE: 2000-04-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Abarzua,
                                                                                                                                                                                                                                                                     LENGTH: 46
TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 44
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
hes 29; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Patricio
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.5%;
                                                                                                                                                              0.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                            Score 21.8;
Pred. No. 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 21.8; DB 10;
Pred. No. 3.4e+04;
                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                            i.4e+04;
les 12;
                                                                                                                                                                           DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15;
                                                                                                                                                                        Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                         Pl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    44;
                                                                                                                                                                                                                                        primer
                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                            Gaps
                                                                                                                                                                                                                                         for
                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                               FEATURE:
OTHER INFORMATION: Description of Artificial Sequence:
OTHER INFORMATION: use in allele discrimination
US-09-827-289-26
                                                                                                                          RESULT 11
US-09-827-289-20
                                                                                                                                                                                          밁
                                                                                                                                                                                                                      ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; OTHER INFORMATION: Description US-09-864-785-3604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-827-289-26/c
                           GENERAL INFORMATION:
APPLICANT: Abarzua, Patricio
TITLE OF INVENTION: Process for Allele Discrimination
TITLE OF INVENTION: Extension
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/09/864,785
CURRENT FILING DATE: 2001-05-23
NUMBER OF SEQ ID NOS: 3929
SOFTWARE: Patentin version 3.0
SEQ ID NO 3604
                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 26
LENGTH: 46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Patent No. US20020177568A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                         Sequence 20, Application US/09827289 Patent No. US20020009716A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 26, Application US/09827289 Patent No. US20020009716A1
                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: U.S. PRIOR FILING DATE: 2000-04-05 NUMBER OF SEQ ID NOS: 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Abarzua, Patricio
TITLE OF INVENTION: Process
TITLE OF INVENTION: Extensi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: Enzymatic Nucleic Acid
TITLE OF INVENTION: Levels of NF-Kappa B
FILE REFERENCE: 400/022 (MBHB00-812-D)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION NUMBER: US/09/827,289
CURRENT FILING DATE: 2001-04-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Draper, Ken APPLICANT: McSwiggen, Jim
              FILE REFERENCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILE REFERENCE: 469290-55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
   CURRENT APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Ribozyme Pharmaceuticals, Inc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 48
TYPE: RNA
                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Artificial Sequence
                                                                                                                                                                                                     2052 TCCTGAGGAGCAGATGACCTTCAAGGACTTGGT 2084
                                                                                                                                                                                        44
                                                                                                                                                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3 UCCUGAGGAGGAAACUCCCUUCAAGGACAUCGU 35
                                                                                                                                                                                       30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Stinchcomb, Dan
                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                , Patricio
NUMBER: US/09/827, 289
                          Extension
                                                                                                                                                                                                                                                                  0.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Extension
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.5%;
                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                   Score 21.6;
Pred. No. 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/194843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 21.8;
Pred. No. 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     of Artificial Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Allele Discrimination
                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3.5e+04;
7;
                                                                                                                                                                                                                                                                   .8e+04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Treatment of Diseases or Conditions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BB
                                                                                                                                                                                                                                                                                  DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 48;
                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                             Using Primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Using
                                                                                                                                                                                                                                                                                                                                              Ρ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nucleic
                                                                                                                                                                                                                                                                                    46
                                                                                                                                                                                                                                                                                                                                             primer
                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Acid
                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
```

0;

0;

```
RESULT 13
US-09-927-777A-72/c
                                                                                                                                                                                                                                                                                                                                                                            맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OTHER INFORMATION: Description of Artificial Sequence: P1 primer
OTHER INFORMATION: use in allele discrimination
US-09-827-289-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 12
US-09-827-289-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-827-289-20
                                                                                                              APPLICANT: Mirkin, Chad A.
APPLICANT: Letsinger, Robert
APPLICANT: Mucic, Robert
C APPLICANT: Storhoff, James
APPLICANT: Elghanian, Robe
APPLICANT: Taton, Thomas A
                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 24, Application US/09827289
Patent No. US20020009716A1
GENERAL INFORMATION:
APPLICANT: Abarzua, Patricio
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQ ID NOS: 35
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT FILING DATE: 2001-04-05
PRIOR APPLICATION NUMBER: U.S. 60/194843
PRIOR FILING DATE: 2000-04-05
NUMBER OF SEQ ID NOS: 35
SOFTWARE: Patentin Ver: 2.1
SEQ ID NO 20
LENGTH: 46
                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local S
                                                                                                                                                                                                                                                    Sequence 72, Application US/09927777A Patent No. US20020172953A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: Process for Allele Discrimination Using TITLE OF INVENTION: Extension FILE REFERENCE: 469290-55 CURRENT APPLICATION NUMBER: US/09/827,289 CURRENT FILING DATE: 2001-04-05 PRIOR APPLICATION NUMBER: U.S. 60/194843 PRIOR EILING DATE: 2000-04-05
    APPLICANT: Park, So-Jung
TITLE OF INVENTION: NANOPARTICLES HAVING OLIGONUCLEOTIDES ATTACHED THERETO
TITLE OF INVENTION: AND USES THEREFOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 46
TYPE: DNA
ORGANISM: Artificial Sequence
FILE REFERENCE: 00-653-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OTHER INFORMATION: Description of Artificial Sequence: Pl primer OTHER INFORMATION: use in allele discrimination
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3386 TTTATAGTTTTTTTTGTAATTTAAGTGGCATTTCTATGC 3424
                                                                                                                                                                                                                                                                                                                                                                                             3386 TTTATAGTTTTTTTTTGTAATTTAAGTGGCATTTCTATGC 3424
                                                                                                                                                                                                                                                                                                                                                                        5 TTTTTTTTTTTTTTTTTTTTAAAAATCATTTCTATTC 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5 TTTTTTTTTTTTTTTTAAAAATCATTTCTATTC 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                         Letsinger, Robert L. Mucic, Robert C.
                                                                                             Garimella, Viswanadham
                                                                                                                                Storhoff, James J.
Elghanian, Robert
                                                                           Li, Zhi
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                  Thomas A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 21.4; DB 10;
Pred. No. 4.3e+04;
0; Mismatches 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 21.4; DB 10;
Pred. No. 4.3e+04;
0; Mismatches 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 46;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          46;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           for
                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
```

```
RESULT 14
US-10-023-096-5/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; OTHER INFORMATION: Description of Art: OTHER INFORMATION: synthetic sequence US-09-927-777A-72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: 09/820,279
PRIOR FILING DATE: 2001-03-28
PRIOR FILING DATE: 2001-01-12
PRIOR FILING DATE: 2000-06-26
PRIOR APPLICATION NUMBER: 09/603,830
PRIOR APPLICATION NUMBER: 09/244,667
PRIOR APPLICATION NUMBER: 09/240,755
PRIOR FILING DATE: 1999-06-25
PRIOR APPLICATION NUMBER: 09/240,755
PRIOR APPLICATION NUMBER: PCT/US97/12783
PRIOR APPLICATION NUMBER: PCT/US97/12783
PRIOR FILING DATE: 1997-07-21
PRIOR APPLICATION NUMBER: 60/031,809
PRIOR APPLICATION NUMBER: 60/176,409
PRIOR APPLICATION NUMBER: 60/176,409
PRIOR APPLICATION NUMBER: 60/192,699
PRIOR APPLICATION NUMBER: 60/192,699
PRIOR FILING DATE: 2000-01-13
PRIOR APPLICATION NUMBER: 60/192,699
PRIOR FILING DATE: 2000-03-28
PRIOR FILING DATE: 2000-03-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 26; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: Microsoft Word 2000
SEQ ID NO 72
                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 5, Application US/10023096 Patent No. US20020160941A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: 60/213,906
PRIOR FILING DATE: 2000-06-26
PRIOR APPLICATION NUMBER: 60/224,631
PRIOR FILING DATE: 2000-08-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: 60/255,235 PRIOR FILING DATE: 2000-12-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: 60/254,392 PRIOR FILING DATE: 2000-12-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/09/927,777A CURRENT FILING DATE: 2001-08-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 60/200,161
PRIOR FILING DATE: 2000-04-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                APPLICANT: Kruzel, Marian L.
APPLICANT: Kurecki, Tomasz
APPLICANT: Gollnick, Paul D.
APPLICANT: Gollnick, Paul D.
APPLICANT: Doyle, Darrell J.
TITLE OF INVENTION: Cloning, Expression,
TITLE OF INVENTION: Lactoferrin
NUMBER OF SEQUENCES: 8
NUMBER OF SEQUENCES: 8
                ZIP: 20004
COMPUTER READBLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 35
                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
                                                                                                     COUNTRY: U.
                                                                                                                                                          STREET: 400 Seventh S CITY: Washington D.C.
                                                                                                                                                                                                        ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                     INFORMATION
                                                                                                                                                                                  E: Jacobson, Pr
400 Seventh St.
                                                                                                                                       U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
PatentIn Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Description of Artificial Sequence:random
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.5%;
76.5%;
                                                                                                                                                                                  Price, Holman & Sterr
St. N.W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 21.2; DB 9
Pred. No. 4.1e+04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
Version #1.25
                                                                                                                                                                                                                                                                                                    and Uses of Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 35;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
```

```
CLASSIFICATION:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US/08/724,586

FILING DATE: 30-SEPT-1996

APPLICATION NUMBER: US 08/238,445

FILING DATE: 05-MAY-1994

ATTORNEY/ACENT INFORMATION:

NAME: Player, William E.

REGISTRATION NUMBER: 10505/P58185C

TELECOMMUNICATION INFORMATION:

TELEPHONE: (202) 638-6666

TELEPAX: (202) 393-5350

INFORMATION FOR SEQ ID NO: 5:

SEQUENCE CHARACTERISTICS:

LENGTH: 42 base pairs

TYPE: nucleic acid

STRANDEDMESS: single

MOLECULE TYPE: DNA (genomic)

HYPOTHETICAL: NO

US-10-023-096-5

0.5%: Score 20.8;
                                                                                                                                                                                                                                                                                                                    APPLICANT: Walston, Timothy
APPLICANT: Cooper, Scott
APPLICANT: Cooper, Scott
APPLICANT: Revzaie, Alireza
TITLE OF INVENTION: ANTITHROMBIN H-HELIX MUTANTS
FILE REFERENCE: 7869.10USU1
CURRENT APPLICATION NUMBER: US/09/828,592
CURRENT FILING DATE: 2001-04-06
PRIOR APPLICATION NUMBER: 60/195,872
PRIOR APPLICATION NUMBER: 60/195,872
PRIOR FILING DATE: 2000-04-07
NUMBER OF SEQ ID NOS: 16
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 2
Search completed: December 11, 2002, 20:51:22 Job time: 122 secs
                                                                                 밁
                                                                                                                                                                                                                                           LENGTH: 42
TYPE: DNA
ORGANISM: Homo sapiens
US-09-828-592-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 15
US-09-828-592-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 2, Application US/09828592 Patent No. US20010055591A1 GENERAL INFORMATION:
                                                                                                                                                        Query Match 0.5%; Score 20.8; DB 10; Best Local Similarity 70.0%; Pred. No. 5.6e+04; Matches 28; Conservative 0; Mismatches 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 0.5%; Score 20.8; DB 9; Length 42; Best Local Similarity 70.0%; Pred. No. 5.6e+04; Matches 28; Conservative 0; Mismatches 12; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/023,096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                              Length 42;
                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                        Gaps
                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
```

THIS PAGE BLANK (USPTO)

```
Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OM nucleic -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Minimum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB
DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               seq
   EST:*

1: en_
2: en_
3: en_
4: em_
5: em_
6: em
6: em
7: em
8: em
9: 9t
110: c
111: c
112: c
111: c
112: c
113: c
114: c
115: c
115: c
116: c
117: c
118: c
118: c
118: c
119: c

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      nucleic search, using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            q length: 0
q length: 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-954-556-3
4268
1 cccaaggaccact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     December 11, 2002, 17:35:24; Search time 3671 Seconds (without alignments) 18829.294 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16154066 seqs, 8097743376 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GenCore version 5.1.3 Copyright (c) 1993 - 2002 Compugen Ltd
em_gss_other:*
em_gss_pro:*
em_gss_rod:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gb_est1:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                   gb_est3:*
gb_est4:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              em_htc:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               em_estro:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             em_estpl:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              em_estov:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            em_estmu:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      em_estin: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           em_esthum:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        em_estba:*
                                                                                               em_gss_mus:*
                                                                                                                                                                                                                                                                                                                   gb_gss:*
                                                                                                                                                                                                                                                                                                                                                                                                                  gb_est5:*
                                                                                                                                    em_gss_mam:*
                                                                                                                                                                 em_gss_fun:*
                                                                                                                                                                                            em_gss_vrt:*
                                                                                                                                                                                                                         em_gss_pln:*
                                                                                                                                                                                                                                                          em_gss_inv:*
                                                                                                                                                                                                                                                                                        em_gss_hum:*
                                                                                                                                                                                                                                                                                                                                                       em_estom: *
                                                                                                                                                                                                                                                                                                                                                                                        em_estfun: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gb_est2:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           102860
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

ult Query No. Score Match Length DB ID 1 26.2 0.6 47 12 BF107886 2 25.4 0.6 43 10 AV832677 3 24.4 0.6 50 9 AA120437 4 24.2 0.6 45 12 BF582680 5 24.2 0.6 49 9 AL649742 6 24.2 0.6 49 9 AL660945	
B ID 12 BF107886 10 AV832677 9 AA120437 12 BF582680 9 AL549742 9 AL649742	
1107886 132677 20437 20437 4982680 49942	
	Description BF107886 601823899 AV833677 AV832677 AA120437 mn47a11.r BF58280 60209408 AL649742 AL649742 AL660945 AL660945

FEATURES

	C C		O	0000	0 00	0 00
44 Δ 5 4 Δ	410 42	2 2 2 2 2 2 2 2 2 2 3 4 4 5 6 7 8 6	26 27 28 30	19 20 21 22 23	113 114 115 116 117	7 8 9 10
222	2222	, , , , , , , , , , , , , , , , , , ,	2222222	$\omega \omega \omega \omega$	N N N N N N N N N N N N N N N N N N N	ωω <u>~</u> ~~
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
50 50	50 50 50	449 499 499	44.000 0000 00000	49 49 49 49	54 55 55 55 55 55 55 55 55 55 55 55 55 5	50 50 44 45
		13 12 9 9 14				
AA590944 BG256941 BI493940	B1858831 AZ346760 AI624136 AL587874	125667 AL660275 AL048743 AU052653 AU052653 BG290798 BG290798 BI090256	AL795414 BI330882 HSM002946 AJ500405 AU104655 AZ624922	AU267061 AA590547 AA590547 AZ587341 AA853120 AL627881 HKM009939 BMM83078	BF691166 BF69288 AU107269 AU107270 HSM003158 BQ393428 AA116935	AA545635 AJ500588 AZ627160 AU268686 AL587734
	81 60338874 50 1M0082F1 5 ts26c11.x 1 AL587874	EST00536 AL660275 DKFZP566 AU052653 AU054068 8 6023891	1 AL795414 32 6029812 32 6029812 31 Homo sap 31 AJ500405 31 AJ104655	NU267061 V164b04.r V164b04.r 1 1M039402 1 NHTBCae03 AL627881 HOMO Sapi		c, c, w c.

ALIGNMENTS

SOURCE ORGANISM RESULT 1 BF107886/c LOCUS cDNA Library Preparation: CLONTECH Laboratories, Inc. cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution information can found through the I.M.A.G.E. Consortium/LLNL at: http://image.linl.gov Plate: LLCM866 row: n column: 24 High quality sequence stor: 8 Eukaryota; Metazoa; Chordata; Graniata; Vertebrata; Euteleostomi; Mammalla; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 47)

NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC) BF107886 4/ DP HONO SAPIENS CDNA CLONE IMAGE:4043735 3', Email: cgapbs-r@mail.nih.gov
Tissue Procurement: CLONTECH Laboratories, Inc. Unpublished (1999)
Contact: Robert Strausberg, Ph.D. mRNA sequence. BF107886 BF107886.1 GI:10890412 Homo sapiens human. Location/Qualifiers EST 19-OCT-2000 be

COMMENT

TITLE JOURNAL AUTHORS

REFERENCE

DEFINITION

KEYWORDS VERSION ACCESSION

```
BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 2
AV832677/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
TITLE
   Best Local
Matches 2
                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               46 AAAAAATAATTACAAAATAAAAAAAAAAAAAAAA 8
      29;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Contact: Kazuhiro Sato
Contact: Kazuhiro Sato
Research Institute for Bioresources
Okayama University, Barley Germplasm Center
Okuo 2-20-1, Kurashiki, Okayama 710-0046, Japan
Email: Kazsato@rib.okayama-u.ac.jp,
URL:http://www.rib.okayama-u.ac.jp/barley/
Sato,K., Saisho,D., Takeda,K., Shini,T. and Kohz
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AV832677 K. Sato unpublished cDNA library: Hordeum vulgare subsp. vulgare top three leaves adult, heading stage Hordeum vulgare
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hordeum vulgare subsp. vulgare.
Hordeum vulgare subsp. vulgare.
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; Pooidea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   database:http://www.shigen.nig.ac.jp/barley/Barley.html
    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  submission;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unpublished (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Barley EST sequencing project in NIG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sato, K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AV832677.1 GI:14524766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      subsp. vulgare cDNA clone baal0b06, mRNA sequence.
                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Triticeae;
   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (bases 1 to 43)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /Clone_lib="NIH_MGC_79"
//Lab_host="DH10B (Ti phage-resistant)"
//note="Organ: placenta; Vector: pDNR-LIB (Clontech);
//note="Organ: placenta; Vector: pDNR-LIB (ggccattatggcc);
//note="Organ: placenta; Vector: pDNR-LIB (ggccattatggcc);
//note="Organ: placenta; Vector: pDNR-LIB (Clontech);
//note="Organ: placenta; Vector: pDNR-LIB (Clontech); Vector: placenta; Vector: pl
                                                                                                                                                                                                                                                                                  /db_xref="taxon:112509"
/clone="baa10b06"
/clone_11b="K. Sato unpublished
/clone_11b="K. Sato unpublished
vulgare subsp. vulgare top three
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="IMAGE:4043735"
                                                                                                                                                    /tissue_type="top three leaves"
/dev_stage="adult, heading stage"
1 C 4 g 31 t
                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Hordeum vulgare subsp. vulgare"
/cultivar="Haruna Nijo"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hordeum.
                             0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ဂ
   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
Score 25.4; DB 10
Pred. No. 9.8e+05;
0; Mismatches 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 26.2; DB 1:
Pred. No. 6.5e+05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     38 t
                                                              DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 12;
                                                                                                                                                                                                                                                                                            three
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     and Okayama Univ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            æ
--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                and Kohara, Y. Direct
                                                                                                                                                                                                                                                                                                                       cDNA library: Hordeum
                                                                                                                                                              G
                                                                                                                                                                                                                                                                                            leaves
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
Indels
                                                           Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                              others
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        47;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EST 22-JUN-2001
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pooideae
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
```

밁 ş

```
KEYWORDS
SOURCE
ORGANISM
                                         RESULT 4
BF582680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 3
AA120437
                                                                                                                         ₽
                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                   BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                      rocus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOCOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
JOURNAL
                                                                                                                                                                                                                       Query Match
Best Local
                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                              4218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                   Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ш
                                                                                                                                           Marra,M., Hillier,L., Allen,M., Bowles,M., Dietrich,N., Dubuque,T. Geisel,S., Kucaba,T., Lacy,M., Le,M., Martin,J., Morris,M., Schellenberg,K., Steptce,M., Tan,F., Underwood,K., Moore,B., Theising,B., Wylle,T., Lennon,G., Soares,B., Wilson,R. and Waterston,R.
BF582680 45 k
602094085F1 NCI_CGAP_Co24 Mus
                                                                                                                                                                                                     . Similarity
34; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1800
Fax: 314 286 1810
Email: mouseest@watson.wustl.edu
This clone is available royalty-free through LLNL; contact the TMAGE Consortium (info@image.llnl.gov) for further information.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The WashU-HHMI Mouse EST Project
Unpublished (1996)
Contact: Marra M/Mouse EST Project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. 1 (bases 1 to 50)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              \tt mn47al1.r1 Beddington mouse embryonic region Mus musculus cDNA clone IMAGE: \tt 541052 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WashU-HHMI Mouse EST Project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AA120437.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AA120437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Seq primer: -40m13 ET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Washington University School of MedicineP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      house mouse.
                                                                                                                                                                                                                                                                                                     44
                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                  /note-Torgan: whole embryo; Vector: pCMV-SPORT; Site_1: SalI; Site_2: NotI; Cloned unidirectionally. Primer: Oligo dT. Gastrulating embryos were collected at 7.5dpc from C57BL6 x DBA matings, excluding embryos that had developed head folds and all extraembryonic tissues. Average insert size: 1.3 kb (range: 0.5 - 3.0 kb). Referenced in Development 121, 2479-2489 (1995)"
                                                                                                                                                                                                                                                                                                 Referenced in Development 121, 1 \text{ c} 1 \text{ g} 4 \text{ t}
                                                                                                                                                                                                                                                                                                                                                                                                                                                         /tissue_type="embryo"
/dev_stage="7.5dpc"
/lab_host="DH12S"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /sex="pooled"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /clone_lib-"Beddington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /clone="IMAGE:541052"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /strain="C57BL/6 x DBA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GI:1675442
                                                                                                                                                                                                                     0.68;
                                                                                                                                                                                                 Score 24.4; DB 9;
Pred. No. 1.6e+06;
D; Mismatches 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       50
                      45 bp
op mRNA linear EST 12-DEC-2000 musculus cDNA clone IMAGE:4208373 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       mRNA
                                                                                                                                                                                                     16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         embryonic region"
                                                                                                                                                                                                                                        Length 50;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EST 19-NOV-1996
                                                                                                                                                                                                     0
                                                                                                                                                                                                     0
```

ACCESSION

mRNA sequence. BF582680

```
JOURNAL COMMENT
                                                                                                                                                                                                                                           REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                              VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 5
AL649742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δõ
  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMMENT
                                                                                                                                                                                                                          TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        _
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequencing primer: SP6
This sequence is from a Xenopus Gene Collection (XGC) library constructed by Aaron M. Zorn.
                                                                       Hinxton, Cambridgeshire, CB10 1SA, UK
Email: trop@sanger.ac.uk
Sanger Xenopus tropicalis EST project 2001
TROPICALIS_SEQUENCE_ID: TGas031111.sp6
                                                                                                                                                                                        1 (bases 1 to 49)
Huckle,E., Taylor,R., Ashurst,J.L., Zorn,A.M. and Rogers,J.
Sanger Xenopus tropicalis EST project 2001 (10_2001)
Unpublished (2001)
                                                                                                                                                                                                                                                                                       Silurana tropicalis
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Jeffrey E. Green, M.D.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium
                                                                                                                                                                                                                                                                                                                                                                                                                           mRNA sequence.
AL649742
                                                                                                                                                                                                                                                                                                                                                                                                                                                             AL649742 XGC-gastrula Silurana tropicalis cDNA clone TGas031111 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      32; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 (bases 1 to 45)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov plate: //image.llnl.gov j column: 22 High quality sequence stop: 45.
                                                                                                                                                             Sanger Centre
                                                                                                                                                                                Contact: Huckle E
                                                                                                                                                                                                                                                                              Xenopodinae; Silurana.
                                                                                                                                                                                                                                                                                                                                                            western clawed frog.
                                                                                                                                                                                                                                                                                                                                                                                                      AL649742.1 GI:17659048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BF582680.1 GI:11656398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     house mouse.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /clone="IMAGE:4208373"
/clone_lib="NCI_CGAP_CO24"
/clone_lib="NCI_CGAP_CO24"
/lab_host="DH108 (T1 phage-resistant)"
/note="Organ: colon; Vector: pCMV-SPORT6; Site_1
Site_2: Sall; Cloned unidirectionally. Primer:
Average insert size 1.6 kb. Constructed by Life
Technologies. Note: this is a NCI_CGAP Library."
a 0 c 1 g 0 t
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /strain="FVB/N"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 24.2; DB 12;
Pred. No. 1.7e+06;
0; Mismatches 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Site_1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EST 13-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Oligo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              þe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ďТ
```

```
REFERENCE
AUTHORS
                                   οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AL660945/c
LOCUS
   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                              ORIGIN
                                                                                                                                                             BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local S
Matches 32
                                                                                    Query Match
Best Local
                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
   49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
nes 32; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              N
l Similarity
32; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                     Email: trop@sanger.ac.uk
Sanger Xenopus tropicalis EST project 2001
TROPICALIS_SEQUENCE_ID: TNeu040f06.sp6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Xenopodinae: Silurana.

1 (bases 1 to 49)

Huckle,E., Taylor,R., Ashurst,J.L., Zorn,A.M. and Rogers,J. Sanger Xenopus tropicalis EST project 2001 (10_2001)

Unpublished (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              western clawed frog. Silurana tropicalis
                                                                                                                                                                                                                                                                                                                                                                                     This sequence is from a Xenopus Gene Collection (XGC) library constructed by Aaron M. Zorn.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Contact: Huckle E
Sanger Centre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AL660945 XGC-neurula Silurana tropicalis cDNA clone TNeu040f06 5',
                                                                                                                                                                                                                                                                                                                                                                                                                           Sequencing primer: SP6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AL660945.1 GI:17675338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Hinxton, Cambridgeshire,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        43 a
                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                           0
                                                                                                                                                   /lab_host~"Escherichia coli DH10B"
/note~"Vector: pCS107; Site_1: EcoRI; Site_2: NotI; cDNA
/note Vector: pCS107; Site_1: EcoRI; Site_2: NotI; cDNA
was oligo dT primed from 5ug of poly A+ RNA from neurula.
EcoRI-NotI cut cDNA was then ligated into pCS107 with
EcoRI at the 5' end and NotI at the 3' end."

1 c 0 g 48 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /dev_stage="gastrula (stages 10.5-13 mixed)"
/lab_host="sscherichia coli XL1-blue"
/note="vector: pCS107; Site_1: EcoRI; Site_2: NotI; cDN/
was oligo dT primed from Sug of poly A+ RNA from stages
10-13 gastrulae. EcoRI-NotI cut cDNA was then ligated
into pCS107 with EcoRI at the 5' end and NotI at the 3'
                                                                                                                                                                                                                                                                                                                  /organism="Silurana tropicalis"
/db_xref="taxon:8364"
                                                                                                                                                                                                                                                                /dev_stage="neurula"
                                                                                                                                                                                                                                                                               /clone_lib="XGC-neurula"
                                                                                                                                                                                                                                                                                                   /clone="TNeu040f06"
                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /clone_lib="XGC-gastrula"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /clone="TGas031111"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Silurana tropicalis"
/db_xref="taxon:8364"
                                                                                    0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ф
С
                                                                      0,
                                                                                   Score 24.2; DB 9;
Pred. No. 1.7e+06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 24.2; DB 9; Pred. No. 1.7e+06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CB10 1SA,
                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  49 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2
t
                                                                                                   Length 49;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 49;
                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NotI; cDNA
                                                                  Gaps
                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
```

```
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 7
                                                                                                                                                                                                                                                                                                                                                          ş
                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                         SOURCE
ORGANISM
                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                            AJ50058B/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                               KEYWORDS
                                                                                                                                                    VERSION
                                                                                                                                                                      ACCESSION
                                                                                                                                                                                                                                                                RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Snoo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                       Contact: Maria ",....
WashU-HHMI Mouse EST Project
Washington University School of MedicineP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       vj65h05.rl Knowles
clone IMAGE:933945
                         Medicago truncatula
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
Rosidae; eurosids I; Fabales; Fabaceae; Papillonoideae; Trifolieae
                                                                                                                             mRNA sequence.
AJ500588
AJ500588.1 GI:22081521
EST.
                                                                                                                                                                                                       AJ500588 MTGIM Medicago truncatula
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Email: mouseest@watson.wustl.edu
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Marra,M., Hiller,L., Allen,M., Bowles,M., Dietrich,N., Dubuque,T., Gelsel,S., Kucaba,T., Lacy,M., Le,M., Martin,J., Morris,M., Schellenberg,K., Steptoe,M., Tan,F., Underwood,K., Moore,B., Theising,B., Wylle,T., Lennon,G., Soares,B., Wilson,R. and
Mediaago.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The WashU-HHMI Mouse EST Project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mus musculus
                                                                                                               barrel medic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MGI:538865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unpublished (1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Waterston, R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mammalia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AA545635.1 GI:2306709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AA545635
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         mmalia; Eutheria; (bases 1 to 49)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            314 286 1800
314 286 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             44
                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /notce "Organ: embryo; Vector: pSPORT; Site_1: NotI; SIte_2: SalI; Cloned unidirectionally from mRNA prepared from 800 blastocysts. primer: SalI(dT): 5'-CGGTCGACCGTCGACCGTTTTTTTTTTTTTTT-3'. cDNAs were
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Technologies). Two different size selections: inserts) and B3."
3 c 2 9 0 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cloned into the Noti/Sall sites of a pSPORT vector
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /strain="C57BL/6J x DBA/2J F1"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /dev_stage="embryo (pre-implantation)"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /clone_lib="Knowles Solter mouse blastocyst
/tissue_type="blastocyst"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /clone="IMAGE:933945"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                 0.6%;
71.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   49 bp mRNA linear EST 04-AUG-Solter mouse blastocyst B1 Mus musculus cDNA 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Chordata; Craniata; Vertebrata; Euteleostomi; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                 Score 24.2; DB 9;
Pred. No. 1.7e+06;
                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                         mRNA
CDNA
                                                                                                                                                                                                                                                                                                                                                                                                 13;
                                                                                                                                                                                                           clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Louis, MO 63108
                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Muridae; Murinae; Mus.
                                                                                                                                                                                                         mtgmacc120018a09,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EST 04-AUG-1997
                                                                                                                                                                                                                           EST 09-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B1 (larger
                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (Life
                                                                                                                                                                                                                                                                                                                                                                                                 0
```

```
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                              SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 9
AZ627160/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMMENT
                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORIGIN
                                                                                                                                                             COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                  KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                  AUTHORS
                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Detection of transcript sequences from mycorrhizal roots of the model mycorrhiza Medicago truncatula genotype A17 - Glomus intraradices using the approach of an EST genome project based on
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          l (bases 1 to
Krajinski, F., N
                                                                                                                                                                                                                                     Dunn,D., Aoyagi,A., Barber,M., Beacorn,T., Duval,B., Hamil,C., Islam,H., Longacre,S., Mahmoud,M., Meenen,E., Pedersen,T., Reilly,M., Rose,M., Rose,R., Stokes,R., Tingey,A., von Niederhausern,A. and Wright,D.,Weiss,R.
                                                                                                                                                                                                                                                                                            Mammalia; Eutheria;
1 (bases 1 to 50)
Dunn,D., Aoyagi,A.,
                                                                                                                                                                                                                                                                                                                      Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sclurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1M0467L09R Mouse 10kb plasmid UUGC1M library Mus musculus genomic clone UUGC1M0467L09 R, DNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
32; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Contact: ... J
LG Molekulargenetik
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Contact: Krajinski
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     an SSH library
Unpublished (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Puehler, A.
Email: ddunn@genetics.utah
Insert Length: 10000 Std
                                      Tel: 801 585 5606
Fax: 801 585 7177
                                                                                                                                                           Unpublished (2000)
Contact: Robert B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AZ627160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bekel,T., Linke,B.,
                                                                                                                    University of Utah Genome Center 
University of Utah
                                                                                                                                                                                                    plasmid inserts
                                                                                                                                                                                                                    Mouse whole genome
                                                                                                                                                                                                                                                                                                                                                                                                  house mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                         AZ627160.1
                                                                                                    308,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /tissue_type="mycorrhizal roots"
/tissue_type="mycorrhizal roots"
/dev_stage="3 weeks after inoculation"
/note="vector: pGEM-Teasy; genotype A17; cDNA was prepared
from total RNA using the SMART PCR cDNA system (Clontech)
from roots harvested three weeks after inoculation with
Glomus intraradices. This cDNA was used as tester in a
Suppression Subtractive Hybridization (SSH). The SSH-cDNA
fragments were generated using the SSH-adaptor sequences
ctaatacgactcactatagggctcgagcgcgggcggggt and
ctaatacgactcactatagggcagcgtggtcgggcggggggt and
ligated after Suppression Subtractive Hybridization in to
the pGEM-Teasy vector from Promega. Plasmids containing
cDNA inserts were propagated in E. coli TOP 10F' cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                               USA
                                                                                                    Biomedical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (Invitrogen)"
1 c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Medicago truncatula"
/db_xref="taxon:3880"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /clone_lib="MTGIM"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /clone="mtgmacc120018a09"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                         GI:11749350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.6%;
71.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Manthey,K., Bartelsmeier,V., Meyer,F., Bartels,D., ke,B., Franken,P., Kuester,H., Perlick,A.M. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ή,
                                                                                                                                                             Weiss
                                                                                                                                                                                                                  scaffolding with paired end
                                                                                                    Polymers Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 24.2; DB 9;
Pred. No. 1.7e+06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
    Error: 0.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hannover, Germany.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 49
                                                                                                  Bldg.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                    20
                                                                                                                                                                                                                      reads from 10kb
                                                                                                    S
                                                                                                    2030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GSS 13-DEC-2000
                                                                                                                                                                                                                                                                                                                                           Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                    (F)
                                                                                                                                                                                                                                                                                Reilly
                                                                                                    SLC,
                                                                                                      Ţ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
```

```
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 10
AU268686
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                               FEATURES
                                                                                                                                                                                                               COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BASE COUNT
                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local
                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                TITLE
                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Plate: 0467
Seq primer:
Class: plasm
High quality
                                                                                                                                                                                                                                                   Takeuchi, I., Kohara, Y. and Tanaka, Y.

Population analysis of cDNAs from unicellular and multicellular stages of Dictyostelium discoideum
                                                                                          1-1-1 Tennoudai, Tsu
Tel: 81-298-53-4664
Fax: 81-298-53-6614
                                                                                                                                                             Institute of Biological Sciences University of Tsukuba
                                                                                                                                                                                                                                                                                                                                                                                                                                              EST
                                                                                                                                                                                                                                                                                                                                                                                                                                                              sequence.
AU268686
AU268686.1 GI:20527484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AU268686 VS Dictyostelium discoideum cDNA clone VSI432 3', mRNA
                                                                                                                                                                                                           Contact: Hideko Urushihara
                                                                                                                                                                                                                                     Unpublished (2002)
                                                                                                                                                                                                                                                                                                                                            Eukaryota; Mycetozoa; Dictyosteliida; Dictyostelium.

1 (bases 1 to 44)
                                                                                                                                                                                                                                                                                                                                                                                           Dictyostelium discoideum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AU268686
                                                                                                                                                                                                                                                                                                                           Urushihara, H., Morio, T., Saito, T.,
                                                                                                                                                                                                                                                                                                                                                                                                                      Dictyostelium discoideum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            quality sequence stop: 50.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptored DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pNB42 (gi|4732114|gb|AF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptored mouse DNA was annealed to adaptored vector DNA and transfermed into
                                                                  hideko@biol.tsukuba.ac.jp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    plasmid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             adaptored vector DNA, and transformed into chemically-competent E. coli XL10-Gold (Stratagene) cells and selected for ampicillin resistance."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /lab_host="E. Coli strain XL10-Gold, T1-resistant, F
/note="Vector: PWD42nv; Purified genomic DNA from M.
musculus C57BL/6J (male) was obtained from the Jack
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Laboratory Mouse DNA Resource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /db_xref="taxon:10090"
/clone="UUGC1M0467L09"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Mus musculus"
/strain="C57BL/6J"
organism="Dictyostelium discoideum"
                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /sex="Male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /clone_lib="Mouse 10kb plasmid UUGC1M library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CACACAGGAAACAGCTATGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ends
                                                                                                                                     Tsukuba, Ibaraki 305-8572, Japan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 24.2; DB 17;
Pred. No. 1.7e+06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                         Koriki, E., Ochiai, H., Maeda, M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    from the Jackson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               50;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EST 10-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
```

```
RESULT 12
BF691166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δõ
                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORIGIN
                                                                                                                                                                         ORIGIN
                                                                                                                                                                                   BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AL587734/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BASE COUNT
                                                                                                                                      Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity 70.1
Matches 31; Conservative
                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                           45
                                                                         BF691166 45 bp m
602247257F1 NIH_MGC_62 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                    Contact: Frazer Murray
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unpublished (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae; Gallus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gallus gallus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ROS061D09, mRNA sequence.
AL587734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AL587734 BP Chicken Brain Library Gallus gallus cDNA clone
                                                                                                                                                                                                                                                                                                                                                                  Seq primer: M13F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Roslin Institute
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP Chicken Brain Library
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       chicken.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AL587734.1 GI:13192768
                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (bases 1 to 45)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27
                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Genomics and Bioinformatics
                                                                                                                                                                                /dev_stage="vegetative"
3 c 1 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /clone="VSI432"
/clone_lib="VS"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /sex="mat A"
                                                                                                                                                                                                                                                         /lab_host="DH10B"
                                                                                                                                                                                                                                                                   /tissue_type="Brain"
/dev_stage="Unknown"
                                                                                                                                                                                                                                                                                            /clone_lib="BP Chicken Brain Library"
                                                                                                                                                                                                                                                                                                         /clone="ROS061D09"
                                                                                                                                                                                                                                                                                                                    /db_xref="taxon:9031"
                                                                                                                                                                                                                                                                                                                              organism="Gallus gallus"
                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                  0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.6%;
                                                                                                                        Score 23.8; DB 9;
Pred. No. 2.1e+06;
0; Mismatches 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 23.8; DB 9;
Pred. No. 2.1e+06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                φ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12 t
 mRNA linear EST 22-DEC-2000 cDNA clone IMAGE:4332206 5',
                                                                                                                                             Length 45;
                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                others
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EST 02-MAR-2001
                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                         0
```

DEFINITION

```
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                             ACCESSION
VERSION
                                                                                                                                                                                                                                                                           RESULT 13
BF692288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                      ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
                                  COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMMENT
                                                                                              REFERENCE
                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local :
                                                 JOURNAL
                                                                  TITLE
                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
                                                                                                                                                                                                                                                                                                                                          N
                                                                                                                                                                                                                                                                                                                                        Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 49)
                                                                                                                                                                                                                                    BF692288 49 bp mRNA linear EST 22-DEC-2 602249170F1 NIH_MGC_62 Homo sapiens cDNA clone IMAGE:4334369 5',
Tissue Procurement: ATCC/DCTD/DTP
                  Emaíl:
                                                           NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                             Homo sapiens
                                                                                                                                                                               EST
                                                                                                                                                                                             BF692288.1 GI:11977696
                                                                                                                                                                                                                           mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    http://image.llnl.gov
Plate: LLCM1198 row: b column: 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Tissue Procurement: ATCC/DCTD/DTP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Contact: Robert Strausberg, Ph.D. Email: cgapbs-r@mail.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BF691166.1 GI:11976574
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 45)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BF691166
                                                                                                                                                               unman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         mRNA sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   found through the I.M.A.G.E. Consortium/LLNL at:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CDNA Library Preparation: CLONETECH Laboratories, Inc. CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Incyte Genomics, Inc. Consortium (Clone distribution: MGC clone distribution information can be
                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      quality sequence stop: 45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cgapbs-remail.nih.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Homo sapiens"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /clone="IMAGE:4332206"
/clone_11b="NIH_MGC_62"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                    0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                    Score 23.8; DB 12;
Pred. No. 2.1e+06;
                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                     12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                          44
                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 45;
                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                        EST 22-DEC-2000
                                                                                                                                                                                                                                                                                                                                                                                                     0,
                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                    0;
```

```
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 14
AU107269/c
                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                             COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ŷ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Snoor
                                                                                                                                                                                                                                                                                                                                              JOURNAL
MEDLINE
                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Department of Virology
Institute of Medical Science, University of Tokyo
4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
Email: ysuzuki@ims.u-tokyo.ac.jp
Suzuki,Y., Yoshitomo-Nakagawa,K., Maruyama,K., Suyama,A. and Sugano
ys. Construction and characterization of a full length-enriched and
a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).
                                                                                                                                                                                                                                                                                                                                                                                        Suzuki,Y., Taira,H., Tsunoda,T., Mizushima-Sugano,J., Sese,J., Ha, Ha, Cta,T., Isogai,T., Tanaka,T., Morishita,S., Okubo,K., Sakaki,Y., Nakamura,Y., Suyama,A. and Sugano,S.

Diverse transcriptional initiation revealed by fine, large-scale mapping of mRNA start sites
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AU107269 Sugano Homo sapiens LNG09312, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                EMBO Rep. 2 (5), 21270072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                http://image.llnl.gov
Plate: LLCM1203 row: l column: 18
High quality sequence stop: 49.
                                                                                                                                                                                                                                                                                                                        Contact: Yutaka Suzuki
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CDNA Library Preparation: CLONETECH Laboratories, Inc. CDNA Library Arrayed by: The I.M.A.G.E. CONSORTIUM (LLNL) DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AU107269.1 GI:13556790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AU107269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  numan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ^{\omega}_{1}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /tissue_type="melanotic melanoma, high MDR"
/lab_host="DH10B (TI phage resistant)"
/note="Organ: skin; Vector: pDNR-LIB (Clontech); Site_1:
Sfil (ggccgcctcggcc); Site_2: Sfil (ggccattatggcc);
Double-stranded cDNA was prepared from cell line RNA. 5'
and 3' adaptors were used in cloning as follows: 5'
adaptor sequence: 5'-CACGGCCATTATGGCC-3' and 3' adaptor
sequence: 5'-ATTCTACAGGCCGACGTC-dT(30)BN-3'
(where B = A, C, Or G and N = A, C, G, Or T). Average
insert size 1.75 kb (range 0.9-4.0 kb). 15/15 colonies
contained inserts by PCR. This library was enriched for
full-length clones and was constructed by Clontech
Laboratories (Palo Alto, CA)."
31 a 6 c 6 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="IMAGE:4334369"
/clone="LNG09312"
/clone_lib="Sugano Homo sapiens cDNA library"
                                                 /organism="Homo sapiens"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /clone_lib="NIH_MGC_62"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.6%;
                                                                                                                                                                                                                                                                                                                                                                       388-393 (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 23.8; DB 12;
pred. No. 2.1e+06;
0; Mismatches 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             bp mRNA linear EST 30-AUG-2001 cDNA library Homo sapiens cDNA clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 49;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
```

```
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 15
AU107270/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BASE COUNT
ORIGIN
Search completed: December 11, Job time : 3684 secs
                                                                              В
                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                    BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 31; Conserv
                                                                                                                                                    Query Match 0.6%;
Best Local Similarity 72.1%;
Matches 31; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
MEDLINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 (bases 1 to 50)
Suzuki,Y., Taira,H., Tsunoda,T., Mizushima-Sugano,J., Sese,J., Hata,H., Ota,T., Isogai,T., Tanaka,T., Morishita,S., Okubo,K., Sakaki,Y., Nakamura,Y., Suyama,A. and Sugano,S.
Diverse transcriptional initiation revealed by fine, large-scale mapping of mRNA start sites
EMBO Rep. 2 (5), 388-393 (2001)
                                                                                                                                                                                                                                                                                                                                                                                                   Department of Virology
Institute of Medical Science, University of Tokyo
4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
Email: ysuzuki@ims.u-tokyo.ac.jp
Suzuki.y., Yoshitomo-Nakagawa,K., Maruyama,K., Suyama,A. and Sugano,S. Construction and characterization of a full length-enriched and a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AU107270 50 bp mRNA linear EST 30-AUG-2001 AU107270 Sugano Homo sapiens cDNA library Homo sapiens cDNA clone LNG09789, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalla; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Contact: Yutaka Suzuki
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AU107270.1 GI:13556791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         æ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         D
                                                                                                                                                                                                                                        /Organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="Luhg09789"
/clone_lib="Sugano Homo sapiens cDNA library"
/clone_lib="Sugano Homo sapiens cDNA library"
/note="Differential display comparison of untreated and dimethylfumarate treated U937 cells"
a 18 c 7 g 17 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note="Differential display comparison of untreated and
dimethylfumarate treated U937 cells"
a 18 c 7 g 17 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.6%;
                    2002, 20:49:10
                                                                                                                                                    Score 23.8; DB 9; Length 50; Pred. No. 2.1e+06; O; Mismatches 12; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 23.8; DB 9;
Pred. No. 2.1e+06;
0; Mismatches 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 50;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                    Gaps
                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
```

THIS PAGE BLANK (USPTO)

187104 Sequence 18 S41355 BEK-fibrobl S41845 TK25-fibrob A29208 DNA probe f

AR007163 132954 187104 S4135551 S4184551

AR007163 Sequence

Description

SUMMARIES

DB

Length

A29211 Oligonucieo AR090311 Sequence AR090312 Sequence AR197346 Sequence AR197347 Sequence

A29211 AR090311 AR090312

AR197346 AR197347 AX077808

Oligonucleo

Sequence Sequence Sequence

AX077808 AX248879 AR019665

Sequence

AX347734 Sequence AX187242 Sequence AX187242 Sequence AX28758 Sequence AX24878 Sequence AX24878 Sequence AX261361 Sequence AX261361 Sequence AX261361 Sequence

AX248879 AR019665 AX410654 AX1441065 AX15942 AX19754 AX194754 AX261761 AX261361 AX261361 AX261361 AX261361 AX261361 AX261361 AX261361 AX261361 AX261361 AX261361

AR020621 Sequence AX287578 Sequence AR019666 Sequence AR007166 Sequence

Run

```
score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                         Query
Match ]
                                                                                          27.4
27.4
25.8
25.8
                                                                                                                                                                                    Score
                                                                                                                                                            24.4
24.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 1
AR007163/C
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                         Result
                                                                                                                                                                      Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOURCE
                                                                                                                                    ....
                                                    December 11, 2002, 16:33:52 ; Search time 7159 Seconds (without alignments) 17350.297 Million cell updates/sec
                                                                                              is the number of results predicted by chance to have a
                                                                                                                                                                   841850
     GenCore version 5.1.3
Copyright (c) 1993 - 2002 Compugen Ltd.
                                                                                                                                                 2054640 segs, 14551402878 residues
                                                                                                                                                                Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                        Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                     - nucleic search, using sw model
                                                                                                                         IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         em_htgo_mus:*
em_htgo_other:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       em_htg_other:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               em_htgo_hum: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              em_v1:*
em_htg_hum:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        em_htg_mam:*
em_htg_vrt:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       em_htg_pln:*
em_htg_rod:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              em_htg_inv:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                em_htg_mus:*
                                                                                       US-09-954-556-3
                                                                                                                                                                                                                                                                                                                               9b_ro:*
9b_sts:*
9b_un:*
9b_v1:*
em_ba:*
em_fun:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                            em_pl:*
em_ro:*
em_sts:*
                                                                                                                                                                                                                                                                                                                                                                                                                                    em_ov:*
em_pat:*
                                                                                                                                                                                                                                                                                                                                                                                                 em_in:*
em_mu:*
em_om:*
                                                                                                                                                                                                                                                     gb_ba:*
gb_htg:*
                                                                                                                                                                                                                                                                                     gb_ov:*
gb_pat:*
gb_ph:*
gb_pl:*
                                                                                                                                                                                                                                                                                                                                                                                                                            em_or:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ел_ph: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      em_un:*
                                                                                                                                                                                                                                                                      gb_in:*gb_om:*
                                                                                                                                                                                                                                              GenEmbl: *
                                                                                                                                                                                  seq length: 0 seq length: 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pred. No.
                                                                                                                         Scoring table:
                                                                                                Perfect score:
                                                                                                                                                                                  Minimum DB :
Maximum DB :
                                      OM nucleic
                                                                                                         Sednence:
                                                                                                                                                  Searched:
                                                                                                                                                                                                                                            Database
                                                       ü
```

132116 Sequence 6 132121 Sequence 11 AX287579 Sequence AX164846 Sequence A81159 Sequence 13 A98105 Sequence 19 A98247 Sequence 19 AR205689 Sequence

132121 AX287579 AX164846

A81159 A98105 A98247 AR205689 AR069130

AR038858

A65157 Sequence 13 AR038858 Sequence AX2257581 Sequence AX229262 Sequence AX287583 Sequence

Sequence Sequence Sequence Sequence

AX287577 AX287577 AX287581 AX158618

PAT 04-DEC-1998 Tobses 1 to 39)
Senco.M., Watanabe.T. and Igarashi,K.
Water-soluble mutein of FGF receptor, DNA and production thereof
Patent: US 5750701-A 15 12-MAY-1998;
Location/Qualifiers linear DNA AR007163 39 bp Sequence 15 from patent US 5750371. AR007163.1 GI:3966647 ALIGNMENTS Unclassified. Unknown. Unknown REFERENCE AUTHORS TITLE JOURNAL FEATURES

```
S41355
S41355.1 GI:232802
                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                      Ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S41845S1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1648704
                                                                                                                                                                                                                                1648704
                                                                                           1 of 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 of 2
                                                                                         SEGMENT
SOURCE
ORGANISM
RESULT 4
S4135531
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                    BASE COUNT
ORIGIN
                                                      ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                    MEDLINE
PUBMED
REMARK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
                                                                                                                                                REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 5
S41845S1
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
KEYWORDS
SEGMENT
SOURCE
                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REMARK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                   TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 10-JUN-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                               ö
                                                                                                                                                                                   PAT 06-FEB-1997
                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 (bases 1 to 30)
Wilson, S.E.
Methods and treatments for corneal healing with growth factors
Patent: US 5703047-A 18 30-DEC-1997;
Location/Qualifiers
                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                              Methods and treaments for corneal healing with hepatocyte and keratinocyte growth factors
Patent: US 5589451-A 15 31-DEC-1996;
Location/Qualiflers
                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                       3 others
                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 0.7%; Score 30; DB 6; Length 30; Best Local Similarity 100.0%; Pred. No. 2.4e+04; Matches 30; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ch 0.7%; Score 30; DB 6; Length 30; 1 Similarity 100.0%; Pred. No. 2.4e+04; 30; Conservative 0; Mismatches 0; Indels
                                                      Score 33; DB 6; Length 39;
Pred. No. 4.6e+03;
3; Mismatches 3; Indels
                                                                                                                                                                                   linear
                                                                                                   DNA
                                                                                                                                                                                   DNA
                       ų
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
t
                                                                                                                                                                             30 bp 1
132954
132954,1 GI:1823745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 18 from patent US 5703047.
187104
187104.1 GI:3206822
                       16
                                                                                                                                                                                                                                                                                                                                                                                                                                                  1242 GATTGAGGTTCTCTATATTGGGAATGTAAC 1271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1242 GATTGAGGTTCTCTATATTCGGAATGTAAC 1271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                              30 GATTGAGGTTCTCTATATTCGGAATGTAAC 1
                                                                                                                                                                                                                                                                                                                                                       /organism="unknown"
7 c 4 q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="unknown"
7 c 4 q
           /organism-"unknown"
                        6
                                                       Query Match 0.8%;
Best Local Similarity 84.6%;
Matches 33; Conservative
                       11 c
                                                                                                                                                                                                                                                               Unclassified.
1 (bases 1 to 30)
Wilson, S.E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity
Matches 30; Conserv
                       ದ
                                                                                                                                                                                                                                                                                                                                                                     11 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11 a
                                                                                                                                                                                                                                          Unknown.
                                                                                                                                                                                                                                                      Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                187104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
ACCESSION
VERSION
  source
                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                            DEFINITION
                       BASE COUNT
ORIGIN
                                                                                                                                                                                                       ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                    BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 3,
187104/c
LOCUS
                                                                                                                                                            RESULT 2>
                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                      AUTHORS
                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
                                                                                                                                                                        132954/c
                                                                                                                                                                                                                                                                                                TITLE
                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
                                                                                                                                                                                                                                         SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                      ö
                                                                                                                          å
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
```

```
PRI 09-MAY-2000
           PRI 09-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                     Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.

1 (bassa) 1 to 36)

Champion-Arnaud, P., Ronsin, C., Gilbert, E., Gesnel, M.C., Houssaint, E. and Breathnach, R.

Multiple mRNAs code for proteins related to the BEK fibroblast Gnocogene 6 (6), 979-987 (1991)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TK25-fibroblast growth factor receptor [3' region] [human, normal leukocyte DNA, Genomic, 36 nt, segment 1 of 2].
$41845
$41845.1 GI:232806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens normal leukocyte DNA.
Homo sapiens
Eukaryota: Metazoa: Chordata: Craniata: Vertebrata: Euteleostomi;
Bukaryota: Metazoa: Chordata: Craniata: Vertebrata: Euteleostomi;
Mammalla: Eutheria: Primates: Catarrhini; Hominidae: Homo.

1 (bases 1 to 36)
Champion-Arnaud, P., Ronsin, C., Gilbert, E., Gesnel, M.C.,
Houssaint, E. and Breathnach, R.
Multiple mRNAs code for proteins related to the BEK fibroblast
Oncogene 6 (6), 979-987 (1991)
S4135531
BEK-fibroblast growth factor receptor {3' region} [human, normal leukocyte DNA, Genomic, 36 nt, segment 1 of 2].
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GenBank staff at the National Library of Medicine created this entry [NCBI gibbsq 41355] from the original journal article. This sequence comes from Fig. 4b.

[Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GenBank staff at the National Library of Medicine created this entry [NCBI glubsq 41845] from the original journal article. This sequence comes from Fig. 4b.

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.6%; Score 27.4; DB 9; Best Local Similarity 96.6%; Pred. No. 1.1e+05; Matches 28; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ب
                                                                                                                                                                                                            Homo sapiens normal leukocyte DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Homo saplens"
/db_xref="taxon:9606"
/cell_type="leukocyte"
9 c 5 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. 36
/organism="Homo saplens"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2549 GAATTCTCACTCTCACAACCAATGAGGAA 2577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              36 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /cell_type="leukocyte"
9 c 5 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BASE COUNT
ORIGIN
```

g

```
/organism="unknown"
10 c 7 g
                                                                                                                                                                                                                                                                                                                                                                     /organism-"unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                          1179 GCCCGACGGGCTGCCCTACCTCAAG 1203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       7 9
                                                                                                                                                                                                                                                                                                                                                                                  11 9
                                                            7
                                                                                                                                    768 GCTCCATGCTGTGCCTGCGGCCAAC 792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   768 GCTCCATGCTGTGCCTGCGGCCAAC 792
                                                                                                                                                1 GCTCCATGCTGTGCTGCGGCCAAC 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25 GCCGACGGCTGCCCTACCTCAAG 1
                                                                                                                                                                                                                                                                                                                                                                                                                   100.08; Pre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.6%; Sccilarity 100.0%; Pr
Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10 c
                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                          Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unclassified.
                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity Matches 25; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 25; Conserv
                                                                                                                                                                                                                                                                                                                                                                                3 a
                                                           Ø
                                                                                                                                                                                                                                                                    Unknown
                                                                                                                                                                                                                                                                                 Unknown,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown.
                                                                                                              25;
                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                       source
                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                          -RESULT 9
                                                                                                                                                                                                              LOCUS
                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                          BASE COUNT
                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                               BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
KEYWORDS
SOURCE
    TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
TITLE
                                                                                                                                                                                                                                     ACCESSION
                                                                                                                                                                                                                                                         KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AR197346
                          FEATURES
                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                               VERSION
                                                                    ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                           ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
                                                                                                                                     ò
                                                                                                                                                        qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                         ö
                                                                                                                        PAT 30-JUN-1995
                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                              PAT 30-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ÷
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 07-SEP-2000
                          Gaps
                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                         ô
                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
0.6%; Score 27.4; DB 9; Length 36; 96.6%; Pred. No. 1.1e+05;
                                                                                                                                                                                                                                                                                   Score 25.8; DB 6; Length 30;
Pred. No. 2.5e+05;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 30;
                                                                                                                                                                                                                                                                                                                                                                                                   Score 25.8; DB 6; Length 3
Pred. No. 2.5e+05;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                        1; Indels
                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 (bases 1 to 25)
Chenchik, A., Jokhadze, G. and Bibilashvilli, R.
                                                                                                                                                                                                                                 /organism="synthetic construct"
/db_xref="taxon:32630"
8 c 11 g 6 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="synthetic construct"
/db_xref="taxon:32630"
8 c 11 g 6 t
                                                                                                                        DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 431 from patent US 5994076. AR090311 GI:10017066
                     0; Mismatches
                                                                                                                                                                                                                                                                                                                               2549 GAATTCTCACTCTCACAACCAATGAGGAA 2577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2488 TGTTGGCATGCAGTGCCCTCCCAGAGACC 2516
                                                                                                                     30 bp
DNA probe from patent WO9111459.
A29208
                                                       synthetic construct.
synthetic construct
artificial sequences.
Location/Qualifiers
                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 93.1%;
Matches 27; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 0.6%;
Best Local Similarity 93.1%;
Matches 27; Conservative
                                                                                                                                                                        synthetic construct.
synthetic construct
artificial sequences
                                                                                                                                                    A29208.1 GI:1248929
         Local Similarity 96.6
hes 28; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unclassified.
                                                                                                                                                                                                                                                     5
a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown
 Ouery Match
                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BASE COUNT
ORIGIN
                                                                                                                                                                                      ORGANISM
                      Matches
                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                    BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
KEYWORDS
                                                                                                                                           ACCESSION
                                                                                                                                                     VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                      RESULT 7
A29211/C
                                                                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 8
AR090311
                                                                                                RESULT 6
                                                                                                            A29208/c
                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOURCE
```

ò 8 õ

```
ö
                                                                                                                                                                                                                                                                                          PAT 07-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 20-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 25;
                                                                                                                        Length 25;
                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chenchik, A., Jokhadze, G. and Bibilashvilli, R. Methods of assaying differential expression Patent: US 6352829-A 431 05-MAR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                           1 (bases 1 to 25)
Chenchik,A., Jokhadze,G. and Bibilashvilli,R.
Methods of assaying differential expression
Patent: US 5994076-A 432 30-NOV-1999;
Location/Qualifiers
Methods of assaying differential expression
Patent: US 5994076-A 431 30-NOV-1999;
Location/Qualifiers
                                                                                                                       Score 25; DB 6; L
Pred. No. 3.8e+05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 25; DB 6; Lk
Pred. No. 3.8e+05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.6%; Score 25; DB 6; L
100.0%; Pred. No. 3.8e+05;
                                                                                                                                                                                                                                                                                          DNA
                                                                                                            0.6%; Scor.
100.0%; Pred. No. ...
                                                                                                                                                                                                                                                                                  25 bp Di
Sequence 432 from patent US 5994076.
AR090312.
AR090312.1 GI:10017067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25 bp Di
Sequence 431 from patent US 6352829.
AR197346
AR197346.1 GI:20247195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
```

4

```
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
                                                                                                                                                               0.6%;
83.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.68;
                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
Unclassified.
1 (bases 1 to 24)
Morrison,R.S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3
C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11 c
                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                              Query Match
Best Local Similarity
Matches 26; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
Matches 24; Conserv
                                                                                                                         2 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ø
                                                                                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BASE COUNT
          REFERENCE
AUTHORS
TITLE
                                                                                                                         BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 15
AX347734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
JOURNAL
                                                                                                                                                                                                                                                                             RESULT 14
AR019665
                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
                                                                                                                                        ORIGIN
                                                                                                                                                                                                                                                                                                                                                                   SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCUS
                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  qq
                                                 PAT 20-APR-2002
                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 22-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 28-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Drosophila recombination-associated protein and methods for use
Patent: WO 0107627-A 9 01-FEB-2001;
ALBERT EINSTEIN COLLEGE OF MEDICINE OF YESHIVA UNIVERSITY (US)
Location/qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="synthetic construct"
/db_xref="taxon:32630"
/note="potential mutagenic oligonucleotide"
6 c 11 g 8 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 24.4; DB 6; Length 37;
Pred. No. 5.8e+05;
0; Mismatches 6; Indels
                                                                                                                                                                                                                                                                             Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                               (bases 1 to 25)
Chenchik, A., Jokhadze, G. and Bibilashvilli, R. Methods of assaying differential expression Patent: US 6352829-A 432 05-MAR-2002;
Location/Qualifiers
                                                                                                                                                                                                                                                                             DB 6; Le
3.8e+05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA
                                                                                                                                                                                                                                                                                                                                                                                                                     DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2133 AAAATGTATTCATCGAGATTTAGCAGCCAGAAAT 2166
                                                                                                                                                                                                                                        4
                                                AR197347 25 bp D. Sequence 432 from patent US 6352829.
                                                                                                                                                                                                                                                                                    100.0%; Pred. No. 3...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31 bp
Sequence 958 from Patent WO0166800.
AX248879
                                                                                                                                                                                                                                                                                                                                                                                                                AX077808 37 bp
Sequence 9 from Patent WO0107627
AX077808
                                                                                                                                                                                                                                                                             0.6%; Score 25;
100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                            1179 GCCCGACGGCTGCCCTACCTCAAG 1203
                                                                                                                                                                                                                           /organism-"unknown"
                                                                                                                                                                                                                                        11 9
                                                                                                                                                                                                                                                                                                                                         25 GCCGACGGCTGCCTACCTCAAG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX077808.1 GI:13157671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX248879.1 GI:15863502
                                                                                     AR197347.1 GI:20247196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             synthetic construct.
synthetic construct
artificial sequences.
1 (bases 1 to 37)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 82.4%;
Matches 28; Conservative (
                                                                                                                                                                                                                                       7 C
                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                     Unclassified.
                                                                                                                                                                                                                                                                                        Best Local Similarity
Matches 25; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ø
                                                                                                                                                                                                                                        Э
В
                                               AR197347
                                                                                                               Unknown.
                                                                                                                        Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Elsen, A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      human.
                                                                                                                                                                                                                                                                             Query Match
                      RESULT 11
AR197347/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                LOCUS DEFINITION
                                                          DEFINITION
                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                       BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          m
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                          TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                          RESULT 12
AX077808
                                                                                   VERSION
KEYWORDS
SOURCE
                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX248879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          rocus
                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 01-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 05-DEC-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Meloidogyne incognita
Eukaryota, Metazoa; Nematoda; Chromadorea; Tylenchida; Tylenchina;
Tylenchoidea; Heteroderidae; Meloidogyninae; Meloidogyne
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Antisense oligonucleotides which reduce expression of the FGFRI
                                                                                                                                                                                                                                                                     Caps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mushegian, A.R., Taylor, C.G., Feltelson, J.S. and Eroshkin, A.M. Materials and methods for the control of nematodes Patent: WO 0196584-A 84 20-DEC-2001;
Akkadix Corporation (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .;
0
                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                             Length 31;
                                                                                                                                                                        1 others
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
1 (bases 1 to 31)
Cargill, ... Ireland, J.S. and Lander, E.S.
Human single nucleotide polymorphisms
Patent: WO 0166800-A 558 13-SEP-2001;
WHITEHEAD INSTITUTE FOR BIOMEDICAL RESEARCH (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 24; DB 6; Leg
Pred. No. 6.7e+05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Meloidogyne incognita"
/db_xref="taxon:6306"
                                                                                                                                                                                                                           Score 24.2; DB 6;
Pred. No. 6.2e+05;
1; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       u
                                                                                                                                                                      m
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Patent: US 5783683-A 4 21-JUL-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 4 from patent US 5783683.
AR019665
AR019665.1 GI:3974779
                                                                                                                                                                                                                                                                                                      1034 ACCGGCCCATCCTCCAAGCCGGACTGCCGGC 1064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX347734 42 bp
Sequence 84 from Patent W00196584
AX347734
                                                                                                                                 /organism="Homo sapiens"
/db_xref="taxon:9606"
a 13 c 12 g
                                                                                                                                                                                                                                                                                                                          1 ACCGCCCATCCTGCRGCGGGGCTGCCGG 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism-"unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               southern root-knot nematode.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     207 AAGTGTGCAGATGGGATTAACGTC 230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 AAGTGTGCAGATGGGATTAACGTC 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX347734.1 GI:18495577
```

ORIGIN

Gaps 0; Query Match 0.6%: Score 23.6; DB 6; Length 42; Best Local Similarity 76.3%; Pred. No. 9.2e+05; Matches 29; Conservative 0; Mismatches 9; Indels

ò

Search completed: December 11, 2002, 19:47:34 Job time : 7169 secs

THIS PAGE BLANK (USPYO)

```
BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ARESUMÉEZ?
132954/c
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                               REFERENCE
AUTHORS
TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                   BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
FEATURES
                                                                                                                                                                                                                   KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                         LOCUS
DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                     RESULT 3
187104/c
                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                            Ş
                                            Ouery Match 0.7%; Score 30; DB 6; Length 30; Best Local Similarity 100.0%; Pred. No. 2.4e+04; Matches 30; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                             Query Match 0.7%; Score 30; DB 6; Length 30; Best Local Similarity 100.0%; Pred. No. 2.4e+04; Matches 30; Conservative 0; Mismatches 0; Indels
source
                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unclassified.

1 (bases 1 to 30)

Wilson, S.E.
Methods and treaments for corneal healing with hepatocyte and keratinocyte growth factors

Patent: US 5589451-A 15 31-DEC-1996;

Location/Qualifiers
                                                                                                                         1 (bases 1 to 30)
Wilson,S.E.
Wethods and treatments for corneal healing with growth factors
Patent: US 5703047-A 18 30-DEC-1997;
Location/Qualifiers
1. 30
                                                                                                                                                                                                                     Unknown.
Unknown.
                                                                                                                                                                                                                                                                   Sequence 18 from patent US 5703047.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 132954 30 bp 1
Sequence 15 from patent US 5589451.
132954 132954.1 GI:1823745
                                                                                                                                                                                                                                                      187104.1 GI:3206822
                                                                                                                                                                                                       Inclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unknown.
                                                                                                             11 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                              11 a
                                                                                                        /organism="unknown"
7 c 4 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism-"unknown"
7 c 4 g
                                                                                                         8
t
                                                                                                                                                                                                                                                                                                                                                                                                                                                          80
(†
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                     Length 30;
                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                    PAT 10-JUN-1998
                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 06-FEB-1997
                                                                                                                                                                                                                                                                                                                                                                                              0;
                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                            0;
                                                                                                                                                                                                                                                                                                                                                                                              0;
```

B



```
REFERENCE
AUTHORS
TITLE
JOURNAL
FEATURES
Source
                                                                                                                                                                                                                                              BASE COUNT
ORIGIN
  밁
                                                     Query Match 0.6%; Score 25; DB 6; Length 25; Best Local Similarity 100.0%; Pred. No. 3.8e+05; Matches 25; Conservative 0; Mismatches 0; Indels
1179 GCCCGACGGGCTGCCCTACCTCAAG 1203
                                                                                                          Unknown.

SM Unknown.

Unclassified.

(CE 1 (bases 1 to 25)

ORS Chenchik, A., Jokhadze, G. and Bibilashvilli, R.

E Methods of assaying differential expression
RNAL Patent: US 5994076-A 432 30-NOV-1999;

TOPES 1. 25

1. 25

1. 25

1. 25

1. 25

1. 25

1. 25

1. 25

1. 25

1. 25

1. 25

1. 27

4 t
                                                                                                                                                                                                                                                                                         AR090312 25 bp DNA
Sequence 432 from patent US 5994076..
AR090312
AR090312.1 GI:10017067
                                                                                                                                                                                                                                                                                                                                 linear PAT 07-SEP-2000
                                                      0.
                                                   Gaps
                                                      0
```

THIS PAGE BLANK (USPTO)